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A PROBLEM IN GROUP ADJUSTMENT

Submitted by

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(B. S. in Ed., Boston University, 1933)

In partial fulfillment of requirements for

the degree of Master of Education

1941

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CHAPTER I

INTRODUCTION

Problem and Purpose:-- This investigation into the problems of adjustment of a representative group of one hundred ninth grade pupils of the Briscoe Junior High School, Beverly, Massachusetts, was undertaken for the purpose of indicating the extent of the need for guidance and to provide a basis for the development of a more comprehensive guidance service.

Delimitation:-- Among the subordinate problems to be considered are the following:

1. How do study habits create a problem in adjustment and indicate a need for guidance?
2. To what extent are problems of adjustment in the ninth grade concerned with mental ability?
3. Does reading ability create a need for guidance and present a problem in adjustment?
4. How does personality adjustment--in the areas of home, health, social, and emotional adjustment--affect the need for guidance?
5. Do occupational choices affect adjustment and

demand guidance?

6. What practical steps can be taken to give any guidance that may be needed in order to effect suitable adjustments?

Procedure:-- A brief description of the development of the junior high school is followed by a summarized statement of the function of guidance in the junior high school, which, in turn, leads to an explanation of the nature and scope of guidance. This second, and largely introductory chapter, is concluded with a description of the needs for guidance.

The main body of this thesis, as presented in Chapters III-VII, is concerned with an attempt to discover to what extent, if any, specific needs for guidance exist among the ninth grade pupils of the school mentioned.

The third chapter is an investigation into the area of study habits. In this instance, the Wrenn Study-Habits Inventory was administered and the results carefully analyzed and summarized. In addition, the pupils were asked to express their own opinions as to what they considered their greatest obstacles to effective studying. A comparison was also made between scholastic achievement and study habits.

The fourth chapter is a summary of the findings on the Otis Quick-Scoring Test of Mental Ability, Beta Test, Form Cm. The results of this instrument bear out the contention that

the group of 100 pupils participating in this study is a representative selection of the entire ninth grade. Furthermore, the relation between mental ability and academic achievement is also shown.

Chapter five is an investigation into the realm of reading ability. Here the procedure was to administer and interpret the results of the Gates Reading Survey for Grades 3 to 10. This instrument purports to measure speed of reading, level of comprehension, vocabulary, accuracy, and general reading ability.

In chapter six an attempt was made to measure the personality adjustment of the pupil in the areas of home, health, social, and emotional adjustment as measured by the student form of the Bell Adjustment Inventory.

The final area investigated was that of occupational choice. An unstandardized questionnaire relative to occupational and educational planning was administered to the group. The replies were duly recorded and interpreted.

The next step was to summarize briefly the conclusions reached from the investigations into five areas of adjustment.

Finally, definite recommendations, in line with sound educational procedure, were advanced.

Description of Group:-- This study was undertaken with 100 pupils representing a random sampling of the 360 pupils in the

ninth grade of the Briscoe Junior High School, Beverly, Massachusetts, during the school year 1940-1941. Beverly is a residential and industrial city of some 25,000 inhabitants, located about twenty miles north of Boston. Of note is the fact that the chief plant of the United Shoe Machinery Corporation, which employs the majority of the men in the city, is located in Beverly.

The pupils were selected at random from those who volunteered to participate in this project outside of school time. That a cross section of the entire ninth grade of 360 pupils is represented can be seen in the fact that thirty-five (twelve girls and twenty-three boys) were from the college preparatory curriculum; thirty-four (eight girls and twenty-six boys) were from the general curriculum; and thirty-one (twenty-eight girls and three boys) were from the commercial curriculum. In addition, the results of a mental ability test showed that the I.Q. of these fifty-two boys and forty-eight girls ranged from 73 to 122, with the median 101, which would indicate a random sampling, at least on this basis of scholastic aptitude.

Since this study was not carried out as a school project, and work with students came at the close of school, it seemed advisable (even though administrative approval was received) to secure the written permission of the parents of the pupils

participating in the study. This was done and all of the parents were very cooperative, as were the pupils, who gave freely of their leisure time to make this study possible. The fact that the pupils took part in this study on a purely voluntary basis and their obvious interest and enthusiasm would seem to add to the validity of the findings; for it is felt that the absence of compulsion in a study of this sort makes for more honest endeavor, free from disinterest and unwillingness.

CHAPTER II

GUIDANCE IN THE JUNIOR HIGH SCHOOL

Development of the Junior High School:-- In a study such as this, which is concerned with an investigation of the guidance needs of junior high school pupils, it is pertinent to review briefly the development of the junior high school and the place of guidance in its program.

The first suggestion may have come in 1888, when President Eliot of Harvard, in an address delivered before the Department of Superintendence of the National Education Association, sketched a platform of reform. He, however, was concerned primarily with the college student. Five years later, 1893, the report of the Committee of Ten did much in lending approval to remedial suggestions which later became important factors in the organization of the junior high school. The report of the Committee of Fifteen, 1895, had very little influence, but the combined power of these two reports led to a general adoption of the principles of departmental organization of teaching and of promotion by subjects in the seventh and eighth grades. Without doubt, one of the moving factors in the junior high

school movement was the report of the Committee on College Entrance Requirements, 1899, which advocated a longer period of time in which to provide a secondary school training of the traditional sort. Up until 1910, however, what progress was made was concerned with the development of the 6-6 plan.

It was not until then that any conscious effort to organize schools on a 6-3-3 basis appears to have been made anywhere in America.[1] The whole junior high school movement may be said to have grown up between 1909-1925. After 1914 the movement spread so rapidly that there were approximately 879 so-called junior high schools in the United States in 1927.[2] Among the pioneer cities to establish the junior high school system were Berkeley, California, 1909; Grand Rapids, Michigan, 1911; and Los Angeles, California, 1911.

> The junior high school movement is one of the major educational movements that has developed in this country in modern times.[3]

That there may be no misunderstanding of the term "junior high school," the following structural definition is presented:

Resolved, that the term Junior High School,

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[1] Calvin O. Davis, Junior High School Education. New York: World Book Company, 1924. pp. 15-29.

[2] Fifth Yearbook of the National Education Association, Department of Superintendence, Junior High School Curriculum. Washington, D.C.: National Education Association of the United States, 1921. p. 13.

[3] Ibid., p. 68.

> as used by this Association [North Central Association of College and Secondary Schools] shall be understood to apply only to schools including the ninth grade combined with the eighth grade, or with the eighth and seventh grades, in an organization distinct from the grades above and the grades below.[1]

Among the most comprehensive definitions of the junior high school is that advanced by Dr. Charles H. Johnston:

> The junior high school is the name we have come to associate with new ideas of promotion, new methods of preventing elimination, new devices for moving selected groups through subject matter at different rates, higher compulsory school age, new and thorough analysis of pupil populations, enriched courses, varied.....curriculum offerings, scientifically directed study practice, new schools for all sorts of educational guidance, new psychological characterizations in approaching the paramount school problem of individual differences, new school year, new school day, new kind of class exercise, new kind of laboratory and library equipment and utilization, and new kinds of ultimate community service.[2]

Such a far-reaching definition jibes with the statement of the Department of Superintendence of the National Education Association that:

> The junior high school is an expression of a changing conception of education.[3]

Despite the attacks that have been made on the junior high school to the effect that it is simply a "fad", an expensive

---

[1] Fifth Yearbook of the National Education Association, op. cit., p. 1.

[2] Calvin O. Davis, op. cit., p. 6.

[3] Fifth Yearbook of the National Education Association, op. cit., p. 13.

proposition, the fact still remains that it is a vital and integral part of our school system.

As Professor C. H. Judd succintly put the matter:

> The Junior High School has grown up in democratic America as the last chapter in the history of the struggle against the mediaeval system.1/

The foregoing material may here be considered the "What?" of the junior high school, but vastly more important is the "Why?" of this educational unit.

Guidance as a Function of the Junior High School:-- An examination of the literature in the field of guidance reveals that there is a wide divergence of opinion as to what constitutes an acceptable definition of the term "guidance".

> There has been a tendency to avoid the important step of fundamental definition because too few are sure enough of what it is or what others think it should be.2/

With few exceptions, however, most educators agree on one part of a definition of guidance; namely, that which aims at the aiding of the pupil to make necessary adjustments of all types which will extend into his adult life.

In the early years of this century, educational thought was permeated, if not dominated, with the theory that "guidance is self direction." This theory had, apparently, gained

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1/ Calvin O. Davis, op. cit., p. 64.

2/ E. A. Fredenburgh, "Guidance Becomes of Age." School and Society, L (December 2, 1939), p. 725.

strong favor when the World War broke out. The aftermath of the war found many problems of unemployment confronting the youth of the nation, from which fact the educators deduced that "education is guidance", a view to which many still adhere. Almost at the same time, the survey movement emphasized the great human waste in education and industry, which led to the belief that "guidance is making choice."[1]

Koos and Kefauver collaborated to advance the definition which found favor with the majority of junior high school principals as the best of the definitions promulgated. They attacked the problem of definition from two angles: the distributive phase and the adjustive phase. The former is referred to as the distribution of youth "as effectively as possible to educational and vocational opportunities," while the latter is concerned with the helping of the individual "to make the optimal adjustment to educational and vocational situations."[2]

President Harper of Chicago University probably opened the age of scientific guidance in 1899. The next definite step seems to have been taken by Frank Parsons in Boston in 1908, for it was he who first used the term "vocational guid-

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[1] Ibid., p. 726.

[2] Leonard V. Koos and Grayson N. Kefauver, Guidance in Secondary Schools. New York: The Macmillan Company, 1932. p. 15.

ance." By 1817, 22 percent of all cities of over 5,000 had vocational guidance departments, with Berkeley, California, having the first complete guidance department in 1919. Finally, in 1922, Los Angeles introduced counseling on the junior high school level.[1/]

This brief historical description has been given to show that:

> The development of the junior high school and of the guidance movement have been roughly coincident in the United States.[2/]

The fact that the junior high school movement and the guidance movement were coincident may or may not have any bearing on the similarity of the purposes and functions of these two phases of our educational system. It does seem, however, that both have much in common. Indeed, an investigation of the purposes of the junior high school today reveals guidance as an objective of paramount importance. An investigation of pupil needs in a single junior high school would be a logical way to proceed in realizing this objective.

Nature and Scope of Guidance:-- No matter how broad or narrow we consider the term "guidance", in the final analysis, the ultimate question still remains: What does guidance aim to accomplish?

[1/] Burton E. Davis, Guidance in the Junior High School. Yokohama, Japan: Yamagoda Press, 1937. pp. 18-24.

[2/] Ibid., p. 30.

To answer this question adequately, due consideration must be given to the educational system of which guidance is but a part. Grayson N. Kefauver voices the consensus in the platform which grew out of the deliberations and discussions of the Conference on Curriculum and Guidance held at Stanford University, June 6-10, 1936. Among the points advanced as part of the platform the following are pertinent to the problem at hand:

> Education should be a positive force for stimulating and giving direction to social changes along lines desirable in a democracy.[1]
>
> Social welfare and the interests of the individual are served best when human talent is distributed according to social need and the individual is engaged in activity which makes full use of his talent, in which he can succeed and in which he is happy.[2]
>
> The educational program should be concerned with the growth and development of individuals along all desirable lines.[3]
>
> A sound educational program calls for a guidance service which aids the student in defining major life goals--vocational social-civic, recreational, and health.[4]
>
> The educational activities should be shaped in relation to the educational and social objectives and the characteristics and needs of the individual.[5]

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[1] Grayson N. Kefauver, "An Educational Platform for 1936." School and Society, XLIV(September 5, 1936), p. 291.

[2] Ibid., p. 292.

[3] Ibid.

[4] Ibid.

[5] Ibid., p. 294.

These, then, are some of the things which a sound educational program should attempt to accomplish. The functions of guidance could not logically, then, be at variance with them, nor are they.

> The school exists to aid the individual to acquire desirable experience and to avoid serious error. It, therefore, must accept responsibility for guidance and must create the organization and develop the methods which will enable it to give counsel and guidance successfully.[1]

This narrows the field to the duty of the school, a larger division than guidance itself of the educational program. The following quotations will serve to show the nature and scope of guidance:

> This is the function of guidance and personal services in the schools of today--to attempt to foresee and predict success or failure; to cater more adequately to individual differences in the school; to prevent the trouble resulting from misplacement as far as possible; and, above all, to plant the seeds of adequate adjustment and make that adjustment a continuous process extending naturally into the individual's occupational life.[2]

> Guidance consists in the agencies, persons, and activities which operate directly in the discovery and treatment of aptitudes, likes and dislikes, strengths and weaknesses of individuals in the areas of personal, social and vocational career building.[3]

1/ Guidance in Secondary Schools, Bulletin of the National Association of Secondary-School Principals, No. 19 (January, 1928), p. 6.

2/ David G. Ryans, "The Role of Guidance in Education." School and Society, L(September 9, 1939), p. 346.

3/ Burton E. Davis, op. cit., p. 17.

> Guidance in the secondary school refers to that aspect of the educational program which is concerned especially with helping the pupil to become adjusted to his present situation and to plan his future in line with his abilities, interests, and social needs.[1]

To be sure, there are many other educators who have voiced their opinions as to what guidance should or should not do. It is enough to say, however, in so far as this study is concerned, that the underlying, basic concept of guidance--by definition and function--is concerned with the problems and phases of adjustment.

By way of emphasizing the adjustment phase of guidance, the following summary is offered:

> Like many other movements, guidance has passed through various stages of emphasis in its development. In the earliest stage it was looked upon as a cure for much of the maladjustment evident in the school life of the pupil and in his later vocational life. Soon, however, the emphasis was changed from that of cure to that of prevention. Much failure, it was found, could be averted by preparing the pupil for both present and future adjustment. The highest stage, and one which is being accepted increasingly, is that the goal of guidance should be not only to cure and to prevent maladjustment but also to make it more nearly possible for every pupil to achieve the most complete, satisfying life possible, both in school and post-school days. The all-round wholesome growth and development of every pupil is a real challenge to those interested in guidance and personnel work.[2]

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[1] Shirley A. Hamrin and Clifford E. Erickson, Guidance in the Secondary School. New York: D. Appleton-Century, 1939. pp. 2-3.

[2] Ibid.

The Need for Guidance:-- The discussion up to this point has been concerned with the "What?" of guidance. It is only logical that it should now proceed to the "Why?" of guidance. Is there a definite need for guidance, or is it just another educational fad which has sprung up to demand more money from the taxpayer?

It seems difficult to believe that there should be any pressing need for argumentative persuasion to establish the need for guidance in the present day educational system. It would be easier to list the instances in which a need for guidance does not manifest itself.

Pupil environment is much more complex than it was a generation ago.

> The adjustment of pupils of high-school age to the complex world in which they live is no simple matter.1/

The secondary-school pupil is overwhelmed with experience which he cannot fully understand and with which he cannot cope because he has no adequate basis for comprehension or interpretation. Science and scientific change have contributed to the many perplexing problems which normally confront an adolescent pupil, who would have enough to contend with were he facing only his own physical, mental, and social problems of de-

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1/ William C. Reavis, Programs of Guidance. U.S. Bureau of Education Bulletin, No. 17, Monograph No. 14 (1932), p. 3.

velopment.

> The extension of compulsory education into the age regions of the secondary school and the growing interest of all classes of people in general education have created problems of educational administration which were seldom encountered in secondary schools of a generation ago.[1]

Teachers as a whole are willing to admit that the period of adolescence is fraught with the necessity of making many adjustments, but there is a serious question as to how many realize the grave importance of some of these adjustments.

One of the most illuminating studies made in this connection was a research conducted by the American Youth Commission.

> The Commission in its studies has discovered a growing need for helping young people adapt themselves to the emotional and social problems of adult life. The failure of many youth to adjust themselves mentally is evidenced in increasing numbers admitted yearly to mental institutions. Of approximately 70,000 first admissions to state hospitals in one recent year, more than one-eighth, or nearly 9,000, were between the ages of 15-24. An unknown additional group entered county, city, and private hospitals, while even a larger number of persons are thought to be suffering from mental illnesses not serious enough to warrant institutional care. No one can estimate the number of young men and women whose lives are being frustrated because of unresolved conflicts associated with faulty childhood training, physical handicaps, their concomitants, with sex worries, the need

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1/ Guidance in Secondary Schools, Bulletin of the National Association of Secondary-School Principals, No. 19 (January, 1928), p. 4.

> for healthful emotional outlets, social underprivilege, and the lack of vocational guidance and opportunity.[1]

If there were no other need for guidance, the fact that 9,000 known first admissions to state hospitals were between the ages of 15-24 would be grounds enough.

The needs of young people at the secondary school level are many and varied. There are literally dozens of evidences of these needs, among them elimination from school, failures in school, various types of educational maladjustment, personality maladjustments, the failure of pupils to realize their maximum potentialities, inappropriate educational choices, irrational vocational choices, and the pupil's lack of understanding about his own abilities, interests, qualifications, and limitations. In this last instance, we still have done very little; here, indeed, there is a crying need for guidance.

It does not seem that further enumeration could emphasize the need for guidance more forcefully than the White House Conference summary statement:[2]

> Counseling procedures should be established in all school systems in order to reduce the human and financial losses that result from failure of individual children to adjust to the school curriculum, and also to assist children to make the educational adjustments which will equip them for a vocation in har-

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[1] Arthur L. Brandon, "Social Hygiene Studied by the American Youth Commission." _Journal of Social Hygiene,_ XXIII, No. 8 (1937), p. 404.

[2] Burton E. Davis, op. cit., pp. 29-30.

> mony with their ability and interests.
>
> Counseling should be made available to all children in those grades in elementary and secondary schools where educational choices and vocational information are important; it should serve pupils of varying ability and ambitions, from the most gifted to the most retarded child, and both adjusted and maladjusted child.

Although there are many needs which are common to all youth, the specific needs of individual pupils in the local situation must be considered and known in order to develop an intelligent program of guidance. That is the purpose of this study.

Summary:-- In this chapter an attempt was made to give a brief summary of the development of the junior high school. From there the procedure was to show the integration of guidance with the junior high school and the nature and scope of guidance. Finally, an attempt was made to show the need for guidance in the junior high school through the enumeration and promulgation of the many needs for guidance in the present educational system.

In the following chapters, information will be presented to indicate the nature of pupil adjustments in selected areas as a basis for the development of a comprehensive guidance service.

CHAPTER III

STUDY HABITS AND ADJUSTMENT

Importance of Study Habits:-- The question may well be raised as to why study habits were considered in an investigation of the problems of adjustment of ninth grade pupils. One educator has said:[1]

> Education in the past has been willing to follow catastrophe; it should occasionally anticipate it.

In other words, why should we wait until a pupil is failing to discover that his difficulty is due to poor study habits? If we do fail to "anticipate" the difficulty and "follow catastrophe", then the only thing that remains is to apply the remedy, which, in this case, would be the teaching of correct study habits and the elimination of faulty ones. If we are to understand a child thoroughly, we cannot afford to overlook this important factor in his struggle for success and against failure. In short, a pupil's method of attacking the problem of success or failure in school work--his study habits--may be the deterring element, and not his native inherent ability.

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[1] Julian Aronson, "An Immediate Problem." School and Society, XXXV(March 5, 1932), p. 318.

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[1] [illegible]

The basic assumption underlying this phase of the study is, obviously, that study habits are a factor in adjustment and that correct ones can be taught.

Survey of Literature:-- The study habits of high school and college students have long been a subject of interest and investigation in the educational field. Many times teachers have been confronted with the task of determining the cause of failure among students with high intelligence quotients, as measured by certain instruments, as well as of those with lower mental ability.

> Confusion frequently exists in the mind of the teacher as to whether the difficulty of the student in attacking his work rests upon a physiological or a motivation basis.1/

Among the many studies conducted in this field is that carried out by Henry J. Mills and others in the public high schools of Buffalo, New York. His method of procedure was to submit to the pupils a questionnaire comprising fifty statements relative to study habits. One of the conclusions drawn from this study follows:

> As measured by this instrument, scholastically superior pupils in high school possess different, and presumably better, study habits than pupils of low achievement, notably with respect to those techniques involving a higher type of study morale, such as

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1/ Francis F. Powers, "Observations on Teaching How to Study." School Review, XLVI(September, 1938) p. 486.

effort, curiosity, and perseverance.[1]

In the study which he conducted, Charles E. Finch found:[2]

> It is easily possible for children to give apparently good recitations and yet not have any adequate idea of what they are talking about.

From data obtained on a questionnaire submitted to 632 pupils of the eighth, ninth, tenth, and eleventh grades of the Parker and Senior High School of Concord, New Hampshire, in 1922, F. T. Clayton deduced:[3]

> The fact that girls give more time to their work than the boys, regardless of age, would seem to be confirmatory of their greater conscientiousness and likewise greater adaptability on their part to prevailing school ways.

He also found that pupils do not study under satisfactory conditions.

R. W. Edmiston added further to the findings by pointing out:[4]

> Students are likely to deny the existence of disturbances due to conditions they desire.

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[1] Henry C. Mills and Others, "Study Habits of High School Pupils." School Review, XLII(December, 1934) p. 761.

[2] Charles E. Finch, "Junior High School Study Tests." School Review, XXVIII (March, 1920), p. 223.

[3] F. T. Clayton, "Home Conditions of Study and Pupil Attitude toward School Work: A Sampling." School and Society, XVII (February 24, 1923), p. 224.

[4] R. W. Edmiston, "Study Conditions in High School and College." School and Society, XLVIII (September 17, 1938), p. 397.

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One of the most enlightening studies undertaken with a standardized measuring device was that carried out by Carl W. Reeder in 1935 with a group of 266 Ohio State University freshmen. The instrument which he used was the Wrenn Study-Habits Inventory, which will be described in the following pages, since it was also used in the study to be reported here.

Reeder found that:[1]

> The test scores on the study-habits inventory were not much in line with known academic records.

He also found that little relationship exists between study habits and intelligence. He summed up his conclusions thus:[2]

> Hence it appears we have a long way to go yet before we capture the exact techniques that make a successful study-habit pattern.

From the conclusions culled from the studies mentioned--that scholastically superior pupils have better study habits, that pupils do not study under satisfactory conditions, that certain study habits are not peculiar to either scholastically superior or inferior pupils--it was deemed advisable to include a survey of the study habits of ninth grade pupils in an attempt to bring to light some problems of adjustment arising from poor study habits.

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[1] Carl W. Reeder, "Study Habits." School and Society, XLII (September 21, 1935), p. 414.

[2] Ibid., p. 415.

Procedure:-- Two plans of procedure were used in analyzing these study habits: first, the Wrenn Study-Habits Inventory was administered; second, the pupils were given the opportunity, unhampered by specific statements, to set forth freely in their own words what they considered their main obstacles to effective study. Because of the realization that self-reports are subject to rationalization, it was felt that this latter procedure would serve to bear out, or disprove, the replies on the standardized instrument. Some of the typical statements will be set forth at appropriate places in this study.

Description of the Wrenn Study-Habits Inventory:-- There is still much to be done in the examination of study habits, but of note among the steps taken is the development of the Study-Habits Inventory by C. Gilbert Wrenn of Stanford University. This instrument is not a test; it is a check-list of study habits. The respondent is asked to check his habitual action in regard to thirty different statements of study habits. Degrees of practice are taken into consideration by having three columns which indicate the extent of the practice---"rarely or never", "sometimes", and "often or always".

> This instrument is based upon the assumption that where two students are equal in intelligence but unequal in scholarship their habits of study must differ markedly.1/

1/ From the Manual of Directions of the Study-Habits Inventory.

Furthermore, the instrument not only identifies the good and bad study habits, but it also indicates which faulty habit the student should correct first by assigning the largest negative weights to those faults which interfere most with good scholarship. In addition, the general quality of a student's study habits is indicated by his total score.

Although the inventory was developed from a battery of statements submitted to students at Stanford University, it was selected for use in this study because no other valid, standardized instrument in this field has yet been devised exclusively for high school pupils. As will be seen, however, the habits of study discussed are, in the main, applicable to both high school and college students because of their fundamental nature.

As has been mentioned before, this study was conducted with 100 volunteer ninth grade pupils--35 from the college preparatory curriculum, 34 from the general curriculum, and 31 from the commercial curriculum--representing a random sampling of the entire ninth grade of 360 pupils in the Briscoe Junior High School in Beverly, Massachusetts.

The Wrenn Study-Habits Inventory Data:-- The Study-Habits Inventory is divided into three sections: note taking and reading techniques, habits of concentration and school interests, and general habits of work.

Table I. shows the distribution of responses to each question. The first column shows the responses of the pupils in the college preparatory curriculum group; the second, those of the pupils in the commercial group; and the third, those of the pupils in the general curriculum group. Since there were exactly 100 pupils to whom this instrument was administered, the fourth column represents the percentage replying rather than the total number, which would be the same as the percentage score.

A. Note taking and reading techniques. Inasmuch as questions of negative weighting indicate that the item is one indicative of low scholarship, it can be seen that, as a whole, many of the study habits of this representative group of 100 pupils must be remedied.

For example, in item one, "I miss important points in the lecture while copying down notes on something which has gone before," 74 percent replied "sometimes" and 5 percent replied "often or always." Thus, 79 percent of the group indicated a need of improvement in this respect, with the replies of the general curriculum group accounting for 30 percent

of those reporting difficulty with this phase of study.

Item two, "I have trouble picking out the important points in material read or studied: tend to take down material which turns out to be unimportant," shows that 64 percent answered "sometimes" and 11 percent "often or always", a total of 75 percent having poor reading techniques. In this instance, however, the distribution was the same for each curriculum, 25 percent.

Item three, "I have to re-read material several times--the words don't have much meaning the first time I go over them," shows an even greater need for improvement, with 81 percent receiving negative scores. Here the college preparatory pupils, with 25 percent, showed a little advantage over the other two curricula, each with 28 percent.

Item seven, "I try to do some 'over-learning', working beyond the point of immediate memory or recall", shows the greatest need of improvement with 98 percent receiving negative scores. The college preparatory pupils, with 32 percent indicated the greatest need. It would seem, then, that these ninth grade pupils, at least, do not exert themselves unduly in their study efforts.

Item eight, "Faulty command of fundamental subjects--spelling, word meanings, arithmetic, punctuation, handwriting, etc.--slows me up, and lowers my grades," seems to bear out

the common lament of teachers of a lack of "background"; for 66 percent of the group reported itself as being conscious of this shortcoming. There is also the question, however, of how many do not realize that this is their difficulty.

Except for items four, five, and six, the above summary shows that more than half of the group reported itself as having poor note-taking and reading techniques, which will become even more important in high school and college where these techniques are more frequently employed. Although favorable responses were registered by the majority of the group on these three questions, the nature of the questions must be considered. For instance, in item six, "I am conscious that I have been out of school too long, or took basic subjects too long ago," 80 percent replied "rarely or never". After all, the pupils are still in school, in the ninth grade.

As was indicated before, the pupils were asked to write in their own words what they considered to be their greatest obstacle to effective studying.

The following typical replies apparently bear out the findings on this section of the Inventory:

> The greatest difficulty in my school work is at times I don't clearly understand what I am supposed to do in certain subjects.
>
> The things that bother me most are oral and written work.
>
> My hold backs are meaning, punctuation, talk-

> ing, and handwriting in English and arithmetic.
>
> I have to reread to get the right meaning out of the thing that I happen to be reading.
>
> Sometimes it is difficult to get the idea of what is wanted.
>
> When I am reading material sometimes I have to go over it three or four times before I get the whole meaning.
>
> Sometimes when the teacher is saying something I just don't get it the first time.

Of course, in this last instance the pupil may not be at fault; that is, the teacher may be at fault in not making the assignment clear. In such a case, teacher adjustment, not pupil adjustment, would be indicated.

B. Habits of concentration and school interests. The second part of the Inventory is concerned with habits of concentration and school interests. It is in this section particularly that the pupils registered their greatest weaknesses, as will be shown in the itemized summary. Items which revealed the greatest difficulties include the following:

Item nine, "I find it hard to keep my mind on what I am studying--don't know what I have been reading when I get through," finds 77 percent of the group receiving negative scores, with the pupils of the general curriculum accounting for 28 percent, the college preparatory for 27 percent, and the commercial for 22 percent.

Item ten, "I have a tendency to 'day-dream' when trying to study," shows 76 percent with negative scores and the general curriculum pupils accounting for 29 percent.

Item eleven, "It takes sometime to get started and 'warmed-up' to the task of study," also leans to the negative scores with 64 percent, the general curriculum group accounting for 26 percent.

Item twelve, "I have to wait for 'the mood to strike me,' or for 'an inspiration' before starting a task; I am likely to waste time," shows a slight decrease in those receiving negative scores, 60 percent; but the general curriculum still polls the highest percentage, 25 percent.

Item thirteen, "Every little noise disturbs my train of thought when trying to study; it is difficult for me to concentrate efficiently," exhibits 68 percent with this faulty habit, this time the college preparatory pupils accounting for 25 percent.

Items fourteen through eighteen show a majority of the pupils indicating favorable responses. Here again the nature of the habits must be considered. For example, item sixteen, relative to smoking, would hardly apply to many junior high school pupils.

From the above summary of the section on habits of concentration and school interests, it can be seen that five, or half, of the habits mentioned are in glaring need of correc-

tion by more than half of the group. In addition, it would seem that the pupils of the general curriculum have the poorest habits of concentration, while those of the college preparatory curriculum are slightly better than those of the commercial group.

The following typical statements made by the pupils themselves show their relation to this part of the Inventory:

> As far as I know I think that if I concentrated more on what I am doing it would be a great help to me. Sometimes when I study I haven't got my mind on what I am working on. Perhaps if I spent more time on my work, it would help too.
>
> Things and noises distract my mind very easily. My mind is easily taken from my work.
>
> I find that if I am not interested in the work I usually do poor but if I am interested I do good work.
>
> Fooling is the main thing that prevents me from studying.
>
> When I am studying for homework I get very much disturbed over the radio. I cannot concentrate when a good program is on.
>
> School life means an education to me in some ways, in other ways it means nothing to me. When I want to study I can. When I don't I just lay down on the job.

Table 1. Distribution of Responses to Items
on the Wrenn Study-Habits Inventory

STUDY-HABITS INVENTORY	Rarely or Never				Sometimes				Often or Always			
A. Note Taking and Reading Techniques	CP	C	G	PC	CP	C	G	PC	CP	C	G	PC
1. I miss important points in the lecture while copying down notes on something which has gone before..................	9	8	4	21	23	23	28	74	3	0	2	5
2. I have trouble picking out the important points in material read or studied: tend to take down material which turns out to be unimportant............	10	6	9	25	21	24	19	64	4	1	6	11
3. I have to re-read material several times--the words don't have much meaning the first time I go over them..........	10	3	6	19	15	22	19	56	10	6	9	25
4. I try to summarize, classify, and systematize the facts learned, associating them with previously learned materials and facts....................	7	4	12	23	24	16	18	58	4	11	4	19
5. I read so slowly that I cannot get over all the assignments and outside readings.........	23	14	20	57	10	14	9	33	2	3	5	10
6. I am conscious that I have been out of school too long, or took basic subjects too long ago....	25	25	30	80	8	6	3	17	2	0	1	3

Table 1. (continued)

STUDY-HABITS INVENTORY	Rarely or Never				Sometimes				Often or Always			
Note Taking and Reading Techniques	CP	C	G	PC	CP	C	G	PC	CP	C	G	PC
7. I try to do some "over-learning," working beyond the point of immediate memory or recall.....	15	12	11	38	17	19	18	54	3	0	5	8
8. Faulty command of fundamental subjects--spelling, word meanings, arithmetic, punctuation, handwriting, etc.--slows me up, and lowers my grades...........	11	12	11	34	21	14	10	45	3	5	13	21
B. Habits of Concentration and School Interests.												
9. I find it hard to keep my mind on what I am studying--don't know what I have been reading about when I get through......	8	9	6	23	20	15	17	52	7	7	11	25
10. I have a tendency to "day-dream" when trying to study.........	9	10	5	24	20	17	17	54	6	4	12	22
11. It takes me sometime to get settled and "warmed-up" to the task of study................	17	11	8	36	15	19	21	55	3	1	5	9
12. I have to wait for "the mood to strike me," or for "an inspiration" before starting a task; I am likely to waste time.......	17	14	9	40	17	14	20	51	1	3	5	9

Table 1. (continued)

STUDY-HABITS INVENTORY	Rarely or Never				Sometimes				Often or Always			
Habits of Concentration and School Interests.	CP	C	G	PC	CP	C	G	PC	CP	C	G	PC
13. Every little noise disturbs my train of thought when trying to study; it is difficult for me to concentrate efficiently.....	10	10	12	32	16	16	11	43	9	5	11	25
14. I find it hard to force myself to finish work by a certain time, under pressure; work is unfinished, inferior, or not in on time..................	19	15	17	51	14	10	12	36	2	6	5	13
15. My enjoyment of loafing, "Bull sessions," "chewing the fat," etc., interferes with my study.	21	21	23	65	12	8	5	25	2	2	6	10
16. I have to study where I can smoke--must "go out and have a smoke" when working at the library, etc..................	35	31	32	98	0	0	2	2	0	0	0	0
17. Dislike of certain courses and professors interferes with my school success................	28	21	23	72	5	8	9	22	2	2	2	6
18. I spend too much time reading fiction, going to shows, etc., for the good of my school work.	19	21	18	58	15	5	12	32	1	5	4	10

Table 1. (continued)

STUDY-HABITS INVENTORY	Rarely or Never				Sometimes				Often or Always			
C. General Habits of Work	CP	C	G	PC	CP	C	G	PC	CP	C	G	PC
19. My study periods are often far too short for me to get "warmed-up" and concentrated..	28	16	13	57	5	14	17	36	2	1	4	7
20. I am careful to make proper use of reviews--reviewing notes taken, setting aside time for daily or weekly reviews during quarter, concentrating review mainly on the points where I feel weakest..................	4	7	5	16	26	14	21	61	5	10	8	23
21. I get "fussed" and nervous on exams.--blow up and can't do myself justice or tell what I know........................	15	12	8	35	11	12	21	44	9	7	5	21
22. I try to get each point as I go over it, rather than go on at the time and then go back to clear up doubtful points later.	8	3	6	17	19	18	19	56	8	10	9	27
23. I study with others rather than myself......................	21	7	20	48	10	18	13	41	4	6	1	11
24. I find myself too tired, sleepy, and listless to study efficiently......................	21	21	13	55	14	9	20	43	0	1	1	2

Table 1. (Concluded)

STUDY-HABITS INVENTORY	Rarely or Never				Sometimes				Often or Always			
General Habits of Work	CP	C	G	PC	CP	C	G	PC	CP	C	G	PC
25. I feel the effects of insufficient exercise..........	31	22	19	72	3	5	12	20	1	4	3	8
26. Sensory or physical defects, or frequent spells or sickness, interfere with study...........	27	29	26	81	6	4	5	15	0	1	3	4
27. I study carefully the outlines in all courses where they are given.........................	6	6	8	22	24	15	22	61	5	10	4	19
28. I try to study too late at night; rob sleep time, and sometimes mealtime, for study..	29	18	16	63	5	13	15	33	1	0	3	4
29. My time is unwisely distributed; I spend too much time on some things and not enough on others.	6	7	8	21	22	19	16	57	7	5	10	22
30. I try to carry over and relate material learned in one course to that learned in others......	11	7	9	27	24	14	19	57	0	10	6	16

C. General habits of work. The third part of the Inventory is concerned with general habits of work. Items which revealed difficulties follow:

Item twenty, "I am careful to make proper use of reviews-reviewing notes taken, setting aside time for daily or weekly reviews during quarter, concentrating review mainly on the points where I feel weakest," shows 77 percent receiving negative scores, the college preparatory leading with 30 percent.

Item twenty-one, "I get 'fussed' and nervous on exams--blow up and can't do my self justice or tell what I know," also reveals a majority with negative scores, 65 percent, and the general curriculum group again the highest, with 26 percent of the 65 percent.

Item twenty-two, "I try to get each point as I go over it, rather than go on at the time and then go back to clear up doubtful points later," is another example of faulty study habits, 73 percent registering negative answers, the college preparatory group accounting for 27 percent of the scores.

Item twenty-three, "I study with others rather than by myself," still indicates a greater percentage revealing negative scores, although only 52 percent. In this instance, however, the commercial curriculum pupils accounted for the greatest part of the negative scores, 24 percent.

Item twenty-five, "I feel the effects of insufficient

exercise," reveals 72 percent with negative scores, the college preparatory group accounting for 31 percent.

Item twenty-seven, "I study carefully the outlines in all courses where they are given," exhibits 83 percent with negative scores, the college preparatory and general curricula each tallying 30 percent.

By way of summary of this section on general habits of work, it appears that half of the twelve items show a serious need of improvement by a majority of the group tested, with the general curriculum pupils again showing the most need.

The following typical statements made by the pupils seem to bear out the responses checked on this section of the Inventory:

> The thing which often affects my studying is lack of concentration and nervousness.
>
> I think that the biting of finger nails keeps me from fully concentrating on my studies.
>
> I get nervous when tests come and sometimes can't think as well, as though I would if I could be by myself.
>
> I get nervous when I am called upon.
>
> My only hindrance in school is that I have trouble with my eyes.

This particular boy has had an operation on his eyes, and he now wears glasses.

> Lack of ability to concentrate and sleepi-

> ness hinders me most in my work.
>
> I find it hard to study in the hall because the seats are uncomfortable and it is hard to write.

This boy has all of his study periods in the assembly hall where there is no provision for writing facilities, not even lap boards.

In all, sixteen of the thirty items of the Inventory revealed an evident need of rectification for substantially the majority of the group.

Since this instrument is of the self-report type, it is subject to the fallacies of any such instrument. There are always some pupils who, despite the fact that they have been carefully instructed otherwise, write what they consider the "best" answer, regardless of whether it applies in their case. This apparently seems true in the case of the pupil receiving the highest positive total score among the pupils of the college preparatory group. The subject received a total score ⁄93; yet he has the poorest scholastic record of anyone in the group. Of course, other factors may account for the discrepancy; but to one who knows the subject, it appears quite evident that he wrote what he considered the "best" answer.

Even so, granted that this particular pupil rationalized, the fact still remains that a majority of the one hundred pupils registered poor study habits; even among the pupils with good

academic records were they found.

It is interesting to note that only one pupil considered herself without difficulty in study habits. The pupil receiving the highest positive score on the Inventory--a girl in the commercial curriculum group--wrote:

> Usually nothing bothers me when I study.

Summary of Pupil Comments:-- A summary of the pupils' expressions of their own difficulties follows:

Table 2. General Summary of Obstacles to Effective Studying as Expressed by the Pupils in Their Own Words

	Difficulty	Number Reporting
1.	Lack of concentration	26
2.	Others' talking	14
3.	Noise	10
4.	Radio	11
5.	Day-dreaming	11
6.	Failure to understand work	8
7.	Fooling	5
8.	Physical discomforts	5
9.	Lack of interest in work	4
10.	Failure to plan sufficient study time	4
11.	Failure to settle down to work	3
12.	Interruptions by people	3
13.	Playing	3
14.	Nervousness	3
15.	Lack of desire to study	2
16.	Inability to understand what is read	2
17.	Poor eyesight	2
18.	Telephone	1
19.	Late hours	1
20.	Hurrying	1
21.	Biting fingernails	1
22.	Sleepiness	1
23.	Distractions of any sort	11

Range of Scores on the Study Habits Inventory:-- Table 3 shows the range of scores for each curriculum group and for the combined groups. In addition, the norms derived from the criterion groups to whom the Inventory was administered are shown. The median scores of the groups are also shown.

From this table it is apparent that no curriculum group attained the median norm of +46 for the high-scholarship group. The median of the general curriculum is closest, +41; and the other two are the same, +38; while the median for the entire group falling in the range of high-scholarship scores is also +38.

In the low-scholarship group, the median of -12 was equalled or excelled by all three curricula groups, that of the college preparatory being -1; the commercial, -2½; and the general, +2. The median for the entire group was -1.

As measured by this instrument, then, it would seem that the study habits of this representative group of one hundred ninth grade pupils are not conducive to good scholarship.

Scholastic Achievement and Study Habits:-- In an effort to correlate the results of this study-habits inventory with other information, it was decided to see what relation, if any exists, between the scores on the Inventory and scholastic achievement. Consequently, an index of the pupil's scholarship for the first current marking period, ten weeks, was devised by letting A

Table 3. Range of Scores, Medians, and Norms for the *Wrenn Study-Habits Inventory*

College Preparatory Curriculum (35)			
Low-scholarship Scores	From +19 to -52	M	-1
High-scholarship Scores	From +20 to +93	M	+33
Commercial Curriculum (31)			
Low-scholarship Scores	From +14 to -67	M	$-2\frac{1}{2}$
High scholarship Scores	From +25 to +101	M	+38
General Curriculum (34)			
Low-scholarship Scores	From +18 to -68	M	+2
High-scholarship Scores	From +22 to +56	M	+41
Combined Curricula (100)			
Low-scholarship Scores	From +19 to -68	M	-1
High-scholarship Scores	From +22 to +101	M	+38

Norms

	25th. Percentile	Median	75th. Percentile
Low-scholarship Group	-34	-12	+19
High-scholarship Group	+24	+46	+70

Table 4. Relation between the Wrenn *Study-Habits Inventory* Scores and Scholarship Indices

Combined Curricula	High-Scholarship				Low-Scholarship				
	No. in Group	+20 thru +24 25th percentile	+25 thru +46 50th percentile	+47 thru +70 75th percentile (above +70 inc.)	No. in Group	-68 thru -34 25th percentile	-33 thru -12 50th percentile	-11 thru +19 75th percentile (below -11 inc.)	Total
Scholarship Index 1.1-2 (B)	13	1	7	5	10	1	2	7	23
Scholarship Index 2.1-3 (C)	21	3	12	6	40	7	5	28	61
Scholarship Index 3.1-4 (D)	8	0	7	1	8	4	0	4	16
Total	42	4	26	12	58	12	7	39	100

equal 1; B, 2; C, 3; D, 4; and E, 5. All subjects were considered, both minor and major. After the averages were found, the following scale was used for the distribution:

Index of Scholarship	Range	Number
0-1	A	0
1.1-2	B	23
2.1-3	C	61
3.1-4	D	16
4.1-5	E	0
		100

Inasmuch as an average of *all* marks was taken, this procedure may account, in part, for the fact that there are none in either the A or E groups.

Table 4, on page 42, is a simplified summary of the data thus obtained. It is to be interpreted in this way: Twenty-three pupils of the one hundred tested obtained scholarship ratings ranging from 1.1 to 2, a literal grade of B. These twenty-three were spread over the entire six percentile groups of the Inventory scale of rating. Sixty-one of the group had scholarship ratings varying from 2.1 through 3, a letter rating of C. These too were distributed throughout the percentile groupings. Six made scholarship indices between 3.1 and 4, or D. In this instance, however, none was found in the range up to the twenty-fifth percentile of the high-scholarship group; nor were there any in the section designating -33 through -12,

the latter being the median for the low-scholarship group. It will be noted, however, that seven of this group that had scholarship indices of D made scores ranging from +25 through +46; exactly the same number, seven, of those having a scholastic index of B also fell in this same percentile range.

As may be seen from this same table, thirteen of the twenty-three pupils having scholastic ratings of B fell to the left of the dividing line, indicating habits which tend to high-scholarship, and ten to the right, indicating habits which tend to low-scholarship. Twenty-one of the group having C fell to the left and forty to the right, while eight of the sixteen having D fell to the left and eight to the right. Summarizing, then, forty-two are registered to the left, and fifty-eight are on the right.

It may have been similar discrepancies as those cited above which led Reeder to conclude that there was not much relation between the test scores on the study-habits inventory and the known academic records.

> A study habit that means success to one is evidently a means of failure for another.[1]

That is, while we may well recognize the fact that there are certain factors conducive to good study habits which are com-

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[1] Carl W. Reeder, "Study Habits." School and Society, XLII (September 21, 1935), p. 415.

mon to many, each person may have, and in most cases does have, individual methods and techniques. Nevertheless, there are certain basic principles which may be of help to anyone trying to establish successful study habits for his own particular situation.

In addition, low grades cannot be explained solely on the basis of study habits. There are many other factors to be considered, such as health, emotionality, motivation, and others.

The writer also recognizes that group scores and general summarizations may not be too meaningful. After all, each pupil is an individual case.

Implications for Guidance:-- What, then, are the implications for guidance in regard to study habits and adjustment?

In the first place, more than half of the group, 58 percent, show a serious need for help in improving their methods of study. While the other 42 percent made favorable total scores, there is much need for assistance in their case also; for little more than half of this 42 percent, twenty-six, attained the median for the high-scholarship group.

Furthermore, since none of the one hundred attained a scholarship rating of 1 or A, there may well be the inference that some of the students with B ratings are getting good grades despite their poor study habits and not because of them.

For instance, why should a girl with an I.Q. of 122 be doing work on the same level as that of a girl with an I.Q. of 92? Maximum effectiveness in study habits might lead to higher academic achievement, especially in the case of those getting B and having poor study habits.

R. S. W. Templin found:[1]

> Entirely too many pupils fail to do work commensurate with their abilities; a number of the children admitted this to their teachers.

From this same study the author concluded:[2]

> If the public school is to continue as the training ground for membership in our democratic society, it cannot ignore the plain duty of requiring children to measure up as nearly as possible to their abilities and capacities, or be required to repeat the year's work,--and this for their own good.

As has been said before, it is the individual who really counts in guidance. Therefore, the greatest good in this instance would probably be done in following the suggestions of the author of the Inventory. He suggests that the examiner encircle all negatively weighted items in the Inventory and then consult with each individual to impress upon him the desirability of improving these habits and so make for more effective study.

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[1] R. S. W. Templin, "A Check-up of Non-Promotions." Journal of Education, CXXIII, No. 8 (November, 1940), p. 260.

[2] Ibid.

Obviously, such a procedure, in this case, would reach only the 100 who filled out the Inventory. What of the other 260 pupils in the ninth grade who were not included in this random sampling? Is it not logical to assume that many of them are experiencing the same difficulties?

To be really effective, a working program of guidance should reach every individual standing in need of it. It would be ideal if it could anticipate this need before an emergency arises. Then it would be positive guidance. Unfortunately, most of our guidance is negative; it comes as a remedy rather than a preventive.

Consequently, it would seem that the determination of pupils' defficulties in studying should come early in the school year. Then the pupil could be ever on the alert to evade consciously those elements which make for ineffective study.

> Guidance very often requires as a major policy (not "strategy") the giving of tests, and it often requires an appraisal or inventory of present abilities and interests.[1]

In the final analysis, however, it seems to the writer that the problem of aiding pupils to make adjustment in study habits must be perforce an individual matter.

Teachers should help pupils to realize

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[1] John M. Brewer, "The Relation between Guidance and Instruction." School and Society, LI(April 13, 1940), p. 480.

> that studying effectively is quite a different thing from studying anxiously.[1]

Many studies have been conducted to determine the feasibility of giving courses on how to study. Among these is the one conducted by Henry C. Mills and others in the public high schools of Buffalo, New York. Mills drew, among others, the following conclusions:

> The questionnaire returns [the unstandardized one he used in his study] indicate that the course in how to study likewise fails to inculcate those habits which are characteristic of the superior high-school pupil.[2]
>
> Pupils who have pursued a course on how to study show higher ratings than control pupils on some of the more technical items covered in the course but do not show, to any greater extent than do the control pupils, those habits which mark the superior high-school pupil.[3]

Francis F. Powers also found:[4]

> Students profit to a very limited extent from long abstract discussions of study techniques.

These findings seem to bear out the contention that the improvement of study habits is largely an individual matter.

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[1] Charles E. Finch, "Junior High School Study Tests." School Review, XXVIII(March, 1920), p. 225.

[2] Henry C. Mills and Others, "Study Habits of High School Pupils." School Review, XLII(December, 1934) p. 761

[3] Ibid.

[4] Francis F. Powers, "Observations on Teaching How to Study." School Review, XLVI(September, 1938), p. 487.

In the last analysis, however, every teacher should assume the responsibility of teaching pupils how to study for his particular subject, since there are techniques which will vary or be more effective for certain subjects than others. Each teacher, from the earliest grades upward, must assume his proper responsibility of assisting each pupil to form effective habits of study, both in terms of general work habits, and in terms of specific study skills and procedures required in a particular subject.

> Real progress is the result of wisely directed individual effort.[1]

In order, however, to insure that someone does assume the responsibility for this "wisely directed individual effort", it seems advisable to delegate this function and not leave it to chance. This would logically be one of the functions of guidance in the ninth grade.

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[1] Charles E. Finch, op. cit., p. 225.

CHAPTER IV

MENTAL ABILITY AS RELATED TO GUIDANCE AND ADJUSTMENT

Significance of Intelligence Tests.-- Since a knowledge of a person's intelligence is essential if we are to evaluate properly the achievements of an individual, this phase of adjustment was included in the present study.

Terman, who has done long and careful research in the realm of the I.Q., says:[1]

> With the exception of moral character, there is nothing so significant for a child's future as his grade of intelligence.

Much of the disapprobation of intelligence tests has been brought about because of their misuse and abuse at the hands of those who were not qualified either to give or interpret them. Careful workers who interpret and use intelligence tests never consider them as final, nor do they rely upon the results of one test alone.

> It is pretty clear that we cannot consider the ability measured by any one test as giving us a simple representation of intelligence.[2]

Furthermore, a score on one intelligence test does

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[1] Lewis M. Terman, The Measurement of Intelligence. Boston; Houghton Mifflin Company, 1916. p. 20.

[2] Frank N. Freeman, "What Is Intelligence?" School Review, XXXIII (April, 1925), p. 258.

not tell the whole story about an individual. It is simply another angle to consider in gaining a true picture of all the factors that go into making up a well-rounded personality.

> A standard intelligence test will give us an idea of a child's mental ability but does not measure his originality, resourcefulness, creative imagination, musical ability, mechanical or social aptitude, nor can it predict what he will achieve. Most of these things can be measured but not by such tests as we are considering.[1]

As carefully limited instruments, intelligence tests are extremely useful if they are used and interpreted intelligently as a basis for comparative evaluations rather than absolute and unfailing final indices.

> Many teachers are ready to adopt the common sense view: when achievement is low and the test data are low, the child is considered to have low ability in that activity; when achievement is high and test data are high, the child is considered to have high ability in that activity; when there is a conflict between test data and achievement, high achievement is accepted as the true index to ability; when the low achievement is thought to involve factors other than abstract intelligence--personality, interest, application--the child is given, humanely, the benefit of the doubt.[2]

In the final analysis, it is apparent that intelligence tests are meant to supplement, not replace, teachers' opinions and judgments. Even those who have argued that teachers can estimate the I.Q. have conceded:

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[1] Troy A. Snyder, "What Intelligence Tests Reveal." Parents, XIII(April, 1938), p. 19.

[2] John T. Wahlquist, "Is the I.Q. Controversy Philosophical?" School and Society, LII(November 30, 1940), p. 547.

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> It is granted that whatever it is that group intelligence tests do measure they do so more consistently than whatever it is that the teachers are attempting to measure.[1]

It hardly seems necessary to go into the I.Q. controversy at this point. At least intelligence tests eliminate the fallacious judgments and reasonings to which teachers as human beings are susceptible.

> Standardized tests have already become and will remain by far the most reliable single method for grading intelligence, but the results they furnish will always need to be interpreted in the light of supplementary information regarding the subject's personal history, including medical record, accidents, play habits, industrial efficiency, social and moral traits, school success, home environment, etc.[2]

Because of the foregoing reasons, an investigation of mental ability seemed an important phase of the pupil to consider in an attempt to analyze his problems of adjustment with a view to giving adequate guidance.

Analysis and Interpretation of Test Data:-- The Beta Test (Form Cm) of the Otis Quick-Scoring Mental Ability Tests was selected for two reasons other than its reliability and validity: it is not used in the Beverly school system as part of the regular testing program, so it would not duplicate previous nor precede later efforts; it is not so long as to be tiring, a factor

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1/ Herbert T. Olander and Bert S. Walker, "Can Teachers Estimate I.Q.'s?" School and Society, XLIV(December 5, 1936), p. 746.

2/ Lewis M. Terman, op. cit., p. 50.

which had to be considered since this testing was not done in regular school time.

Table 5. shows a summarized analysis of the results of the test by curriculum groups. In the analysis of the general curriculum group it will be seen that the raw scores on the test ranged from 29 to 66, with the median being 50.5. The chronological age of the group ranged from 13 years 9 months to 17 years 5 months; the median was 15 years 3 months. The mental age, however, ranged from 10 years 8 months to 16 years 10 months, showing a median of 14 years 3 months. The I.Q.'s went from 73 to 119 with 99.5 being the median.

A word of explanation regarding the derivation of the I.Q. should be included here. It will be seen that the median mental age is one full year below the median chronological age. If the I.Q. were figured as it is in the Binet and Terman tests, by dividing the mental age by the chronological age, the median I.Q. would be 93. However, the author of the test recommends another method to determine the measure of brightness for this particular test which is comparable to the I.Q.

This procedure involves three steps:

1. Find the norm for the pupil's age from a table provided in the manual of direction.
2. Find the amount by which the pupil's score exceeds or falls below the norm for his age.

(Call this the "deviation of score.")

3. Add the pupil's deviation of score to 100, or subtract from 100 if the deviation is downward. The result is the pupil's "Beta I.Q."

Thus, by figuring the I.Q. according to this method, the median I.Q. for the general curriculum was found to be 99.5.

In the commercial curriculum the raw scores ranged from 28 to 69, with 51 the median. The chronological age of the group varied from 13 years 9 months to 16 years 6 months, with the median 14 years 7 months. The range of mental ages was from 10 years 7 months to 17 years 4 months, 14 years 4 months being the median. The I.Q.'s went from 76 to 119, the median being 96.

In the college preparatory curriculum group the raw scores ranged from 37 to 71, the median being 53. The chronological ages varied from 13 years 11 months to 16 years 8 months, with 14 years 6 months being the median. The mental ages ranged from 12 years 0 months to 17 years 8 months, with 14 years 8 months being the median. The I.Q.'s ranged from 83 to 122, with 104 being the median.

The total range of the 100 scores was from 28 to 71, with 52 being the median. The range of the chronological ages of the entire group went from 13 years 9 months to 17 years 5

months, with 14 years 7 months the median. The mental ages varied from 10 years 7 months to 17 years 8 months, with 14 years 6 months being the median. The I.Q.'s went from 73 to 122, with 101 being the median.

While no statistical significance can be attached to the differences noted in the following paragraphs, however, by way of summary, it will be seen that the median raw score of the college preparatory curriculum group, 53, exceeded that of the commercial curriculum pupils, 51, by two points; while the latter exceeded the median of the pupils in the general curriculum group by only one half a point.

It will also be noted that the median chronological age of the general curriculum exceeds that of the two other groups, and the median chronological age of the commercial curriculum group exceeds that of the college preparatory curriculum group.

The median mental ages, however, do not show such a wide divergence; but here the ages vary inversely with the chronological age scales. The pupil of the general curriculum has the lowest median mental age, 14 years 3 months; those in the commercial curriculum group show a slight increase of one month, while the median mental age of the college preparatory curriculum group is 14 years 8 months.

The pupil of the commercial curriculum showed the lowest median I.Q., 96, with the general curriculum being slightly higher at 99.5, and the college preparatory curriculum highest

Table 5. Range and Medians of Raw Scores, Chronological Ages, Mental Ages, and I.Q.'s for 100 Ninth Grade Pupils on the Beta Test (Form Cm) of the Otis Quick-Scoring Mental Ability Tests

Curriculum	Range of Raw Scores	Median	CA Range	Median	MA Range	Median	I.Q. Range	Median
General	29-66	50.5	13-9 17-5	15-3	10-8 16-10	14-3	73-119	99.5
Commercial	28-69	51	13-9 16-6	14-7	10-7 17-4	14-4	76-119	96
College Preparatory	37-71	53	13-11 16-8	14-6	12-0 17-8	14-8	83-122	104
Combined Curricula	28-71	52	13-9 17-5	14-7	10-7 17-8	14-6	73-122	101

with 104.

From these figures it will be seen that this group of 100 pupils is a representative sampling of the entire ninth grade. In addition, it will also be noted that, although the general curriculum is usually considered to be a reservoir curriculum for those unable to do the work of the other two curricula, there are pupils in this group who, apparently, are well-equipped mentally to do the work of the commercial or college preparatory curriculum. Furthermore, the median I.Q. for this general curriculum group is higher than that of the commercial group. It would seem that some explanation should be forthcoming as to the manner of placing pupils in the different cur-

Table 6. Distribution of I.Q.'s for 100 Ninth Grade Pupils on the Beta Test (Form Cm) of the Otis Quick-Scoring Mental Ability Tests

I.Q. Range	C. Prep.	Com'l.	Gen'l.	Total
Above 140	0	0	0	0
120-140	1	0	0	1
110-120	10	7	3	20
90-110	21	17	24	62
80-90	3	5	6	14
70-80	0	2	1	3
Below 70	0	0	0	0
Totals	35	31	34	100

ricula.

Table 6, on page 58, shows the distribution of I.Q.'s according to the seven classifications suggested by Terman.[1] As will be seen by these figures, the great majority, 62, as would be expected, fell in the classification designating I.Q.'s ranging from 90-110, suggested by Terman as being "normal, or average, intelligence."

Test Scores and Academic Achievement.-- It will be recalled that in the previous chapter on Study-Habits an attempt was made to evaluate the scholastic achievement of the group by determining their scholastic indices.

Tables 7, 8, 9, and 10, on pages 60, 61 and 63, show the relation between academic achievement as indicated by the scholastic indices and mental ability as indicated by the I.Q.'s derived from the test administered for each curriculum group and for the combined groups.

Utilizing the scholastic indices referred to in the previous chapter, it will be seen in Table 7 that ten pupils in the college preparatory group attained scholastic indices ranging from 1.1 to 2, a literal grade of B, the rank required for college certification. Of these ten, one person had an I.Q. between 120 and 140, indicating very superior intelligence; four had I.Q.'s between 110 and 120, indicative of superior intelli-

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[1] Lewis M. Terman, op. cit., p. 79.

gence; and five had I.Q.'s ranging from 90 to 110, indicating normal, or average, intelligence.

Seventeen pupils of this curriculum had scholastic indices ranging from 2.1 to 3, indicative of a literal grade of C, or average. Six pupils having superior intelligence, I.Q.'s ranging from 110 to 120, were in this group; and eleven pupils of average or normal intelligence (I.Q.'s from 90 to 110) were included.

Table 7. Relation of I.Q.'s to Scholastic Achievement of 35 Pupils in the College Preparatory Curriculum

Range of I.Q.'s	Scholarship Indices			
	1.1-2 (B)	2.1-3 (C)	3.1-4 (D)	Totals
120-140	1	0	0	1
110-120	4	6	0	10
90-110	5	11	5	21
80-90	0	0	3	3
70-80	0	0	0	0
Totals	10	17	8	35

Five pupils of average intelligence had scholastic indices from 3.1 to 4, a D, meaning they passed unsatisfactorily. Three pupils having I.Q.'s ranging from 80 to 90, indicating mental dullness, also were in this scholastic classification.

From this analysis it would seem that at least six people

Table 8. Relation of I.Q.'s to Scholastic Achievement of 31 Pupils in the Commercial Curriculum

Range of I.Q.'s	Scholastic Indices			
	1.1-2 (B)	2.1-3 (C)	3.1-4 (D)	Totals
120-140	0	0	0	0
110-120	3	4	0	7
90-110	5	9	3	17
80-90	0	4	1	5
70-80	0	2	0	2
Totals	8	19	4	31

Table 9. Relation of I.Q.'s to Scholastic Achievement of 34 Pupils of the General Curriculum

Range of I.Q.'s	Scholastic Indices			
	1.1-2 (B)	2.1-3 (C)	3.1-4 (D)	Totals
120-140	0	0	0	0
110-120	1	2	0	3
90-110	4	18	2	24
80-90	0	4	2	6
70-80	0	1	0	1
Totals	5	25	4	34

of superior intelligence were doing only average work academically. This may be due, of course, to any of various factors. On the other hand, five pupils who were supposedly of only average mental ability were doing B, or very good work. Again, this may be due to excessive application or many other reasons.

Table 8 for the commercial curriculum group may be interpreted in the same manner. Here these significant points should be noted: Four pupils having superior mental ability attained scholastic indices indicating only C or average work. Yet five persons having only average mental ability attained scholastic averages of B, indicating very good work; while three pupils of average ability attained scholastic indices between 3.1 and 4, or D, indicating unsatisfactory work. Four persons with I.Q.'s indicating "dullness, rarely classifiable as feeble-mindedness", (80 to 90), did average or C work, as did two pupils who had I.Q.'s ranging from 70 to 80, I.Q.'s which are indicative of "border-line deficiency, sometimes classifiable as dullness, often as feeble-mindedness."

Here, again, these discrepancies may be due to a variety of factors, which involve the subjectivity of teachers' marks and many other points. It is not the purpose of this study to delve into these factors at this point, but surely any program of guidance which attempted to solve the problems of adjustment should be concerned with them.

In Table 9, showing the same data for the general curriculum, we find two pupils of superior intelligence doing only C work. And yet, we find one pupil with an I.Q. between 70 and 80 also doing C work. It is generally agreed that the work of this curriculum is less technical and much less academic than that of the other two curricula. Consequently, it is even more significant that two of the pupils with superior intelligence are still doing only mediocre work.

Table 10. Relation of I.Q.'s
to Scholastic Achievement of
100 Ninth Grade Pupils

Range of I.Q.'s	Scholastic Indices			
	1.1-2 (B)	2.1-3 (C)	3.1-4 (D)	Totals
120-140	1	0	0	1
110-120	8	12	0	20
90-110	14	38	10	62
80-90	0	8	6	14
70-80	0	3	0	3
Totals	23	61	16	100

Table 10, which shows the same data of the combined curricula, indicates that one person of very superior intelligence is doing B, or good work. It would seem that this pupil is conceivably not working up to his capacity.

Of twenty pupils of superior intelligence only eight are

doing better than average work, and twelve are doing just C, or average, work.

Of sixty-two pupils of normal intelligence, fourteen are doing better than average work; thirty-eight, just average; and ten, unsatisfactory.

Of fourteen pupils of dull-normal ability, eight are doing average work, and six are doing unsatisfactory work.

Three pupils bordering on mental deficiency are doing C, or average, work.

Summary and Implications for Guidance.-- It is apparent from the test scores and I.Q.'s that these 100 pupils in the group being studied represent a normal distribution in terms of mental abilities.

What could a program of guidance do to determine what adjustments should be made?

Obviously, the first step would be the administering of additional tests of mental ability to verify the present results. In addition, tests of special abilities and aptitudes would be helpful.

The principal problem would seem to be to account for the discrepancies between abilities, as measured by tests of scholastic aptitude, and achievement as measured by teachers' marks. It seems that some investigation should be made to determine why twelve of twenty superior pupils are not doing the

work of which they are inherently capable.

Furthermore, ideally, ten pupils of average, or normal, intelligence should not be attaining unsatisfactory marks. They should at least be held to the average grade, C.

In addition, there should be some explanation forthcoming of why eight pupils, who, apparently, are dull-normal, can do average work; and three who border on mental deficiency can also do average work.

Certainly there appears to be a wealth of evidence here that indicates a need for guidance, for counseling services, for an interpretation of course offerings, and perhaps the marking system.

> When we have learned the lessons which intelligence tests have to teach, we shall no longer blame mentally defective workmen for their industrial inefficiency, punish weakminded children because of their inability to learn, or imprison and hang mentally defective criminals because they lacked the intelligence to appreciate the ordinary codes of social conduct.1/

The task then of educational guidance, as revealed by the foregoing data, is to assist the individual so in the choice of courses and curricula that he can make maximum progress toward a goal which is individually suited to him.

1/ Lewis M. Terman, op. cit., p. 21.

CHAPTER V

READING AS A FACTOR IN ADJUSTMENT

The Importance of Reading:-- That reading abilities and disabilities are important factors in the adjustment of students is probably obvious. The importance of reading as a tool to school adjustment is emphasized in numerous studies in the field of reading.

Despite the fact that reading is one of the most basic and important tools that pupils use, it is estimated that only one out of every four persons reads efficiently. Even among adults the reading ability of the average American just measures up to that of the normal sixth grade school-boy.[1]

It seems evident that a pupil's success in school depends, in a large measure, on his ability to read effectually. Yet it is estimated that there may be 30,000 children in New York City alone who are classed as abnormal because of a reading disability.[2]

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[1] John E. Lodge, "Do You Know How To Read?" Popular Science Monthly, CXXXI(September, 1937), p. 36.

[2] Marjorie B. Greenbie, "Some Children Can't Read." Parents, XI(October, 1936), p. 30.

> In fact, one in seven of the pupils in our city schools, it is estimated, fails to learn with facility, and suffers sufficient psychic disturbance from that failure to make a problem case of him. Children's courts have discovered that many young people who come before them are almost always five years retarded in reading ability.[1]

In the modern world reading is even more important than in days of old when we consider that 85 percent of what modern man learns is taken in by the eye, most of it by reading.[2] Not only is this skill valuable and fundamental to scholastic endeavor, but it is also a heavy contributor to the pleasures of persons fortunate enough to be able to read.

> Because inefficient reading is responsible for 60% of all failures in school, $612 of every $1000 spent for primary schooling is spent to teach reading.[3]

Obviously the primary school recognizes that the teaching of reading is a vital part of its program; that is, if the time and money spent on it is indicative of anything.

> The mistake has been made in secondary-schools of assuming that pupils are not in need of post-elementary instruction in reading.[4]

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[1] Jerome Barry, "Americans Cannot Read." Readers' Digest, XXVIII(April, 1936), p. 22.

[2] "First R; Testing and Correcting Reading Habits." Time, X(December 6, 1937), p. 56.

[3] Ibid.

[4] American Council on Education. What the High Schools Ought To Teach, 1940. p. 12.

The error has persisted despite the fact that many secondary school pupils have reading abilities of fourth or fifth grade level.

A wealth of material could be produced here to stress the importance of reading. It hardly seems necessary. Can there be any doubt, in view of the facts already mentioned, that reading holds an important place in the educational scheme?

Improvement of Reading--Its Significance for This Study:-- This factor of reading is introduced into the present study on the basic assumption that reading is a factor in adjustment and--of even greater importance--something can be done about it. In other words, low reading ability exists apart from low intelligence as a cause of failure and cannot be considered as a necessary handicap which is co-existent with low mentality.

That educators at the secondary school level are increasingly aware of this situation is apparent by the attention being given to reading abilities. The outlook is hopeful in view of the fact that numerous studies conducted have not only diagnosed the ill but have also provided a successful remedy.

In a study concerning the difficulties of junior high school pupils, Walter A. Anderson, assistant in the department of curriculum construction in the Minneapolis school system, found that many junior high school pupils have difficulty because of inability to read.

> The difficulties they experience are manifold; the most prevalent may be listed as follows; (1) failure in school subjects because of inability to read understandingly the daily assignments, (2) maladjustment socially because of a sense of failure, and (3) disciplinary difficulties due to inability to keep up to their classmates scholastically.[1]

Also of note are the conclusions drawn by Paul B. Jacobson as the result of reading instruction given in ninth grade science classes.

> (1) Reading lessons given in general science produce superior knowledge of general science to an extent which cannot be explained by chance. (2) Reading lessons given in general science have a beneficial effect on the general scholastic achievement of ninth-grade pupils.[2]

An experiment carried on at the University High School of the University of Chicago shows that twenty-three of twenty-seven pupils made greater improvement in reading during periods of remedial training varying from eight to twenty-four weeks in length than would be expected in a year's school work without special training.[3]

Pearl Sands McCarty conducted an experiment at West Virginia University High School.

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[1] Walter A. Anderson, "Junior High School Readers in Distress." School Review, XL(April, 1932), p. 252.

[2] Paul B. Jacobson, "Effect of Work-type Reading Instruction Given in the Ninth Grade." School Review, XL(April, 1932) p. 281.

[3] James M. McCallister, "Effectiveness of Remedial Instruction in Reading in the Junior High School." School Review, XXXIX (February, 1931), pp.97-111.

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> The results of this experiment show (1) that remedial instruction gave a greater, though not a statistically significant, increase in comprehension, as measured by the Iowa Silent Reading Tests, than was gained from regular classroom work; (2) that comprehension was increased without impairing the rate of reading; (3) that magazines and newspapers as remedial materials are helpful in achieving an increase in reading ability; and (4) that about equal gains were made by pupils of low and average intelligence.[1]

This last finding apparently bears out the contention that low reading ability exists as a cause apart from intelligence in school failures.

Of 150 freshmen in the Little Falls High School, Minnesota, 122, or 81.3 percent, were below ninth grade standard as measured by the Iowa Silent Reading Test in 1928. The median for the group was 7.1 grades. After remedial instruction, even pupils with low intelligence quotients made large gains.

> The deficient readers gained 2.1 grades in reading ability in twenty-three weeks.[2]

In his attempt to answer the question as to whether the high school pupil can improve his reading ability, Dudley H. Miles reached the conclusion that:

> Dull, slow readers can be taught to read more accurately, and even bril-

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1/ Pearl S. McCarty, "Increasing Comprehension in Silent Reading." School Review, XXXIX(December, 1931), pp. 765-766.

2/ Paul B. Jacobson and E. C. Van Dusen, "Remedial Instruction in Reading in the Ninth Grade." School Review, XXXVII (February, 1930), p. 146.

> liant pupils can be urged to a higher degree of comprehension.[1]

In his discussion of the problem, David G. Ryans points out:

> It seems possible that just as intelligence, as we measure it, does not yield itself to great modification, reading ability, based upon the same sort of a constant function, may not permit of substantial or permanent change. Of course, in the same manner that coaching may raise an individual's score upon a test, so also may reading accomplishment be improved for specific situations. But it is being a bit premature to announce that any general or permanent change can be effected.[2]

Despite the apparently discordant note, even Mr. Ryans is not so pessimistic as to assert dogmatically that no good can be accomplished from reading instruction at the secondary level.

To quote further results of other studies in the field of reading would avail us little at this point. Perhaps the best summary is the following quotation from Dr. Bess Goddykoontz, Assistant Commissioner of Education, in an address to the National Society for the Study of Education:[3]

> It may be said that in the present curriculum the year-book committee sees increased obligations and opportunities

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[1] Dudley H. Miles, "Can the High School Pupil Improve His Reading Ability?" Journal of Educational Research, XIV (September, 1926), p. 97.

[2] David G. Ryans, "Some Questions Pertaining to Reading." School and Society, XLIII(April 25, 1936), p. 573.

[3] "Place of Reading." School Life, XXII(April, 1937), p. 236.

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> for reading to contribute to students' development; that in order to serve its purposes, specific reading guidance is necessary in all school levels and practically all phases of the curriculum, including literature, and in reading periods set aside for basic instruction; and that in reading periods sequences of training in habits, attitudes, and skills must be provided on successively high levels.

Description of Test Used and Test Results:-- This phase of the study was continued with the original representative group of 100 ninth grade pupils--52 boys and 48 girls. The instrument selected for use was the Gates Reading Survey for Grades 3 to 10, which measures four aspects of reading ability--vocabulary, comprehension, speed, and accuracy. The eighty-five words of the vocabulary test were all selected from the Thorndike list of 20,000 words most common in representative reading materials. The comprehension test consists of thirty-five paragraphs of graduated difficulty. Both the vocabulary and comprehension tests are work-limit tests, eliminating the factor of speed. The speed of reading test consists of sixty-four short paragraphs of equal difficulty, with seven minutes the time allotment. The accuracy rating is determined by computing the percentage of paragraphs correctly read in the speed test.

Table 11. Range of Scores for 100 Ninth Grade Pupils on the Gates Reading Survey for Grades 3 to 10

Curriculum	CA	Speed Test			Comprehension Test			Vocabulary Test			Average		Accuracy	
		Raw Score	Grade Score	Age Score	Raw Score	Grade Score	Age Score	Raw Score	Grade Score	Age Score	Grade Score	Age Score	PC Right	Rating
College Prep.	13-11 to 16-9	22 to 54	4.8 to 12.0	10-7 to 17-8	54 to 79	7.3 to 12.0	13-0 to 17-8	35 to 73	5.6 to 11.6	11-5 to 17-3	6.3 to 11.5	12-8 to 17-1	88 to 100	Very Low Very High
Commercial	13-10 to 15-11	17 to 61	4.0 to 13+	9-8 to 18-8+	45 to 78	5.8 to 11.7	11-8 to 17-4	30 to 68	5.1 to 11.0	10-11 to 16-9	6.0 to 11.5	11-8 to 17-2	86 to 100	Very Low Very High
General	13-10 to 17-5	17 to 64	4.0 to 13+	9-8 to 18-8+	41 to 78	5.1 to 11.7	10-11 to 17-4	29 to 79	5.0 to 12.3	10-10 to 18-0	5.8 to 12.3	11-2 to 18-0	79 to 100	Very Low Very High
Combined Curricula	13-10 to 17-5	17 to 64	4.0 to 13+	9-8 to 18-8+	41 to 79	5.1 to 12.0	10-11 to 17-8	29 to 79	5.0 to 12.3	10-10 to 18-0	5.8 to 12.3	11-2 to 18-0	79 to 100	Very Low Very High

Tables 11 and 12, on pages 73 and 75, show a summarized analysis of the results of the reading test.

Speed Test:-- Table 11 shows the range of the scores for each group and for the combined curricula groups. The raw scores on the speed test for the pupils of the college preparatory curriculum group ranged from 22 to 54; for the commercial group from 17 to 61; for the general curriculum pupils, from 17 to 64; and for the entire group, from 17 to 64. The grade scores on this same test varied from 4.8 grades to 12.0 for the college preparatory group; from 4.0 to 13+ for the commercial curriculum pupils; from 4.0 to 13+ for the general curriculum pupils; and from 4.0 to 13+ grades for the entire group. The age scores on this test showed a range varying from 10 years 7 months to 17 years 8 months in the college preparatory group; from 9 years 8 months to 18 years 8+ months in the general curriculum group; and from 9 years 8 months to 18 years 8+ months for the entire group.

In table 12, on page 75, showing the median scores, we find that the median chronological age for the college preparatory group was 14 years 7 months; for the commercial, 14 years 8 months; for the general, 15 years 3½ months, and for the entire group, 14 years 8 months.

The median grade score on the speed test for the college preparatory group was 8.5 grades; for the commercial, 8.0; for

Table 12. Median Scores Obtained by 100 Ninth Grade Pupils on the *Gates Reading Survey for Grades 3 to 10*

Curriculum	CA	Speed Test			Comprehension Test			Vocabulary Test			Average		Accuracy	
		Raw Score	Grade Score	Age Score	Raw Score	Grade Score	Age Score	Raw Score	Grade Score	Age Score	Grade Score	Age Score	PC Right	Rating
College Prep.	14-7	39	8.5	14-3	69	9.8	15-6	60	9.9	15-7	9.3	15-0	100	High
Commercial	14-8	37	8.0	13-9	66	9.3	15-0	55	9.4	15-1	8.9	14-5	97	Medium
General	15-3½	36	7.8	13-7	66	9.2	14-11	52.5	9.1	14-10	8.9	14-6½	97.5	Medium
Combined Curricula	14-8	36	7.8	13-7	68	9.6	15-4	55.5	9.45	15-2	9.05	14-7½	98	Medium

the general, 7.8 and for the entire group, 7.8 grades.

In this instance, as in any general picture, the individual is obscured. For example, the median of the college preparatory group is one grade below their actual level in school. Yet even below this median, there were seventeen who failed to reach it, some of the pupils going as low as the fourth and fifth grade level in speed of reading.

The median for the commercial group was a grade and a half below their level in school; and yet fifteen pupils were even below this median, with pupils also going down to the fourth and fifth grade level.

The general curriculum grade median was even lower, 7.8 grades; and still there were sixteen pupils below this median.

If we consider that the reading test was given during the week marking the end of the first half of the current school year, then we can see even more significant facts. The pupils were all at the 9.5 grade level as far as actual placement in school. Yet, in the college preparatory group, only six attained this grade level or better; in the commercial group, only four; in the general group, only six, making a total of sixteen out of 100 who were at the same grade level in speed of reading as the grade in which they were placed in school

Comprehension Test:-- The figures for the comprehension test are to be interpreted in the same manner. Here the median for

the college preparatory group was 9.8 grades; for the commercial, 9.3; for the general, 9.2; and for the entire group, 9.6. If only the median for the entire group were considered, the obvious conclusion would be that this group was better in comprehension than the average. In this case also, however, the individual must be considered. In the college preparatory group eleven pupils of the thirty-five fell below the 9.5 grade level; in the commercial group, sixteen of the thirty-one fell below; in the general group, twenty of the thirty-four fell below, making a total of forty-seven, or very nearly half of the group, who were not up to their grade level in comprehension. When we consider also that some went as low as the fifth grade level, medians become even less significant by comparison.

Vocabulary Test:-- In the vocabulary test the median grade score for the college preparatory group was 9.9 grades; for the commercial, 9.4; for the general, 9.1; and for the entire group 9.45 grades. The median for the group, then, was practically the same as the grade placement level, 9.5.

What of the individuals in this case? In the college preparatory group, eleven fell below the 9.5 grade level; in the commercial group, seventeen fell below; in the general curriculum, twenty-two fell below, making a total of fifty, or half, of the group who were below their grade level in vocabulary.

To be sure, some of these were close to the 9.5 grade level; but seven were as low as the fifth grade level.

Average:-- The median average grade levels for the entire test were as follows: 9.3 grades for the college preparatory group; 8.9 grades for the commercial group; 8.9 grades for the general; and 9.05 for the entire group. In the college preparatory group, twenty fell below; and in the general group, twenty-four fell below, making a total of fifty-two, more than half of the group, who were below their grade level in general reading ability. Of particular note is the fact that twenty-three, almost one fourth of the group, were either at the fifth, sixth, or seventh grade level.

Accuracy:-- The accuracy rating was derived by computing the percentage of correct answers on the speed test. The median for the college preparatory group was "high"; for the commercial group, "medium"; for the general group, "medium"; and for the combined groups, "medium". However, in the college preparatory group, five were rated as "low" and one as "very low"; in the commercial group, seven were "low" and three "very low"; in the general curriculum, four as "low" and three as "very low"; making a total of twenty-three who were "low" or "very low" in reading accuracy.

Implications for Guidance:-- If we accept this group of 100 pupils as representative of the total 360 members in the ninth

grade of the school in question, the apparent conclusion is that many of the pupils are handicapped by a reading disability, some more seriously than others. This granted, what is the next step?

From the various studies reported here, and others, it is apparent that a reading disability leads to other maladjustments and makes for behavior problems, unsatisfactory school attitudes, and even elimination from school. If reading disabilities have such far-reaching effects, the logical step would be to prevent them, in so far as possible, and so avoid these other ills.

> Blanchard points out that persistent reading difficulties may lead to feelings of inferiority and to personality maladjustments.1/

It seems that the elimination of a reading disability wherever possible would result in the elimination of other undesirable factors: social maladjustment, apparent laziness, apathy, delinquency, and failure in school subjects.

Yet, even if reading instruction is continued into the secondary schools, it must not be assumed that all pupils will become equally competent. This fact seems self-explanatory in view of the fact that all pupils are not equally endowed mentally.

1/ David G. Ryans, "Some Questions Pertaining to Reading." *School and Society*, XLIII(April 25, 1936), p. 573.

> Individual abilities and values in reading should be recognized in the light of their relativity......Our interests should be in those who can, and want to, read. It should be our aim to make education possible for those who are capable of accepting it, but it does not seem to be our duty to demand that various levels achieve and appreciate at the same levels.[1]

When, however, it is determined that reading disability is definitely not the result of low intelligence, it seem apparent that special attention is needed. When it is found that intelligent students who fail consistently in their studies are laboring under the handicap of a reading disability, it does not seem that one would accept the status quo as inevitable in such a case.

As in the case of the development of good study habits, it cannot be stressed too strongly that every teacher should do his part. Each department could, and should, furnish the kinds of training in reading best suited to its need.

In addition there must be special instruction for those who are more seriously retarded in reading ability. In such instances, administrators are usually faced with the necessity of counting the financial cost. Apparently, Walter A. Anderson, assistant in the department of curriculum construction in the Minneapolis public school system, had this in mind when he wrote:

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[1] Ibid.

> In the opinion of the writer, reading clinics can be organized and operated in the present high-school organization. There need be little additional cost. No subject need be sacrificed to make room for the clinic. A change of emphasis to individual instruction instead of mass instruction is necessary as a first step in the remedial problem.[1]

In this field of adjustment, as in the area of study habits, we must revert again to the procedure of considering the individual child. Each reading case is a case by itself and demands individual instruction. Even if this individual instruction did involve additional expense, it would seem justfied in the light of the many concomitant results arising from this one disability, especially when we can attribute subject matter failures in many instances to a reading disability.

> The best time to form the habit of reading good books is between the ages of twelve and fifteen, because then the child is no longer interested in juvenile stories, and he will either begin to read sound literature or slip into the tabloid type.[2]

This places the problem definitely in the hands of the junior high school; for when the average child is between the ages of twelve and fifteen, he is usually in the junior high school, or grades corresponding to junior high school grades. It goes without saying, however, that the habit of reading

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[1] Walter A. Anderson, op. cit., p. 254.

[2] "Speed and Skill and Reading." Literary Digest, CIX(June 13, 1931), p. 25.

good books, or any other books, cannot be developed until efficient reading has been.

> Some children do not learn to read because they do not want to learn, because they have been badly taught, because they are emotionally unstable, because they are immature, because they have poor general intelligence, or because they have defective vision. But when all these cases have been dismissed, there still remains a large group, comprising from five to ten percent of school children, with a much higher proportion of boys than girls, who are the true reading disability cases.[1]

If education in general has failed to prevent reading disabilities, then guidance in particular must provide the remedy. Simply diagnosing the ill and tracing some form of maladjustment to a reading disability is not enough. Such remedial instruction as is possible, feasible, and expedient must be supplied, whenever possible and necessary through individual instruction.

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[1] Marjorie B. Greenbie, op. cit., p. 30.

CHAPTER VI

PERSONALITY ADJUSTMENT

Definition of Personality Adjustment:-- Successful living, whether on the adult or adolescent level, depends upon the successful personal and social adjustment of the individual, both to himself and to those around him.

> Educators everywhere now are professing a renewed solicitude in the individual child. If this is to be anything more than sentiment, it must be based on, among other things, a more thorough knowledge of the adjustment status of each individual pupil. A knowledge of individual differences in personality adjustments is the only sound basis for the education of the individual.[1/]

Any attempt to exhaust the numerous definitions of personality would be beyond the scope and purpose of this study.

> Personality can be defined as the total combinations of the effects which we have upon other people and upon ourselves.[2/]

This definition is accepted as suitable for our present

[1/] Percival M. Symonds and Claude E. Jackson, Measurement of the Personality Adjustments of High School Pupils. New York: Teachers College, Columbia University, 1935. pp. 105-106.

[2/] Willis L. Uhl and Francis F. Powers, Personal and Social Adjustment. New York: The Macmillan Company, 1939. p. 355.

consideration, even though it is recognized that there are many others advanced from various points of view. Because this is a study in adjustment--adjustment to ourselves and to our surroundings--this seems an adequate definition of personality adjustment for our purposes.

The satisfactory adjustment of this intangible thing called personality is the issue with which we are concerned at this point.

> A person is well-adjusted if he can meet the various situations which he faces day by day adequately and efficiently. If a person's habits and skills enable him to satisfy his needs, to fill his wants, and to give him satisfaction, then he is adjusted. If, in meeting a new situation, a person is able to cope with it adequately by his intelligence, in so far he is well adjusted. The unadjusted individual is one whose habits and skills are inadequate to meet the demands of the situation, or who lacks the ability to solve the problems which are met in the course of every day living.[1]
>
> Therefore when we say that a person is well adjusted, we mean that he has developed the flexibility to meet new conditions as they arise, to change his behavior according to changing circumstances.[2]

Importance of Personality Adjustment:-- It must be admitted that it is only within the past few years that the public

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[1] Lester A. Kirkendall, Factors Related to the Changes in School Adjustment of High School Pupils. New York: Teachers College, Columbia University Contributions to Education, No. 705, 1937. pp. 1-2.

[2] Willis L. Uhl and Francis F. Powers, op. cit., pp. 5-6.

schools have concerned themselves to any effective degree with this problem of personality adjustment.

> In the secondary school, particularly, until recent years the responsibility for adjustment has been placed chiefly upon the pupil, and failure has been employed as a remedy for maladjustment in spite of the fact that the school has known that failure is not a remedy at all, but merely the symptom of a bad state of affairs.[1]

> Teachers at all levels are becoming increasingly aware that one of the most important and, at the same time, one of the most baffling problems which they confront is the problem of developing in children and youth what for the lack of a better term may be called a wholesome personality.[2]

Much of the interest in pupil adjustment came about in what may be termed a negative approach; that is, increasing numbers of maladjusted adults and young people centered attention upon the problem.

> The tragedy of the unadjusted school child has so frequently resulted in the even greater tragedy of the psychotic adult and the social delinquent that school authorities everywhere are finding it one of their major responsibilities to give careful consideration to the undesirable behavior symptoms of childhood.[3]

1/ William C. Reavis, "Pupil Adjustment in Secondary School." _Junior-Senior High School Clearing House_, V(January, 1931),p.290.

2/ "Important Guide to the Use of Tests of Personality." _Elementary School Journal_, XXXIX(September, 1938), p. 12.

3/ Elise H. Martens, "Berkeley's Coordinated Program of Child Adjustment." _School Life_, XVI(November, 1930), p. 56.

It is true that some maladjustments are of a temporary and transient nature and do no grave harm to the individual. Like a fever, they weaken the patient temporarily, run their course, and then disappear, leaving no trace of their presence. On the other hand, there are other forms of maladjustment which persist over a period of time. Like a cancerous growth, they are apparently harmless, gnawing insidiously, until finally they reach the pernicious stage where effective remedy is long, painful, and not always certain.

> Adjustment becomes a matter of mental health, and the child who unsuccessfully reacts to the intricate and baffling problems of his own childhood and adolescent environment is lacking that vigor of adequate functioning which characterizes a desirable state of health.1/

Is there any doubt, then, as to the necessity of aiding our young people to make adequate adjustment to the many complex phases of their environment? We cannot stop with the child's life within the school walls either; for

> ......clinical evidence shows plainly that children sit in classes and go through the motions of lessons while suffering acute anxieties, fears, and unhappiness, because of their family situations that they either hide or express in symptomatic misconduct, delinquency, truancy, or other outbreaks.2/

1/ Percival M. Symonds and Claude E. Jackson, op. cit., p. 2.

2/ Lawrence K. Frank, "Changes in Home and Family Life and Their Relation to Education." School Life, XXIII(March, 1938), p.241.

In other words, the school may suffer the results of maladjustments because of causes or factors outside its schoolroom realm.

> Our maladjustments are due today not so much to lack of control of our physical surroundings or to failure to provide the necessities and comforts of life, as to a failure to manage the social order and to educate for social living.[1]
>
> Personal and social adjustment is the chief issue of human living.[2]

From the foregoing discussions, it seems apparent that the problem of personality adjustment is introduced into the present study on these basic assumptions:

1. That while it is recognized that we cannot define personality in material terms, we can teach some of the traits which go into the making up of a pleasing personality.
2. That if the school is to meet its full responsibility, it must include as one of its fundamental objectives the development of desirable personality traits.

This implies the positive approach--the prevention of maladjustments in personality. Provision must always be made, however, in this as in subject matter failure, for the remedial

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[1] Percival M. Symonds and Claude E. Jackson, op. cit., p. 2.

[2] Willis L. Uhl and Francis F. Powers, op. cit., p. iii.

measures necessary.

Investigations in Personality Adjustment:-- That the public schools not only are aware of the importance of pupil adjustment but also are doing something about it is evidenced by the studies carried on in this field.

Among the investigations in this area is that conducted by Austin H. Turney and Mary Fee at the Oread Training School at the University of Kansas in September, 1934.[1] The Bell Adjustment Inventory was administered to 85 pupils of high school age. Six months later it was given again, 78 pupils taking it both times. After the Inventory was administered, the teachers were asked to rate the pupils without a knowledge of the Bell scores. The results were such that they lead the authors to conclude:

> When teachers have once formed opinions concerning the adjustment of a pupil, they are slow to change their opinions because of any contrary evidence produced by the Adjustment Inventory.[2]

The implication is that teachers lack the ability and training to use instruments like the Bell Adjustment Inventory for guidance purposes.

Among the most extensive studies is that carried on by Percival M. Symonds and Claude E. Jackson, the cumulation of

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[1] Austin H. Turney and Mary Fee, "Attempt to Use the Bell Adjustment Inventory for High School Guidance." School Review, XLIV(March, 1936), pp. 193-198.

[2] Ibid., p. 198.

several years of study and investigation of the measurement of personality adjustment of high school pupils.[1] In this instance the Symonds Adjustment Questionnaire was used with several thousand high school pupils. Among the conclusions drawn were the following:

> A survey of the facts of adjustment gives no clue to the causes of adjustment. These tests, questionnaires, and rating scales, while accurately revealing the facts of adjustment, do not indicate the antecedents to these facts.[2]
>
> So the measurement of personality adjustments of school pupils should not be limited to the adjustments merely within the school walls, but should cover all phases of the adjustment of the child.[3]
>
> In short, measuring instruments for use in an adjustment survey would be of use in the discovery of pupils showing incipient tendencies toward maladjustment.[4]

Of further interest is the research done by Lester A. Kirkendall in the Junior-Senior High School of Hastings-on-Hudson, New York, in 1933-1934.[5]

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[1] Percival M. Symonds and Claude E. Jackson, Measurement of the Personality Adjustments of High School Pupils. New York: Teachers College, Columbia University, 1935. xi + 110 pp.

[2] Ibid., p. 77.

[3] Ibid., p. 4.

[4] Ibid., p. 3.

[5] Lester A. Kirkendall, Factors Related to the Changes in School Adjustment of High School Pupils. New York: Teachers College, Columbia University Contributions to Education, No. 705, 1937. 90 pp.

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Here the Symonds Adjustment Questionnaire, Myers Intra-Family Questionnaire, and the Sims Socio-Economic Scale were administered to all pupils (774) in grades nine through twelve, 320 being in the three upper grades. Some of the conclusions follow:

> Many factors in the home environment exist which carry over into the school life of the pupil, and which call for correction within the home environment if the pupil is to be well-adjusted in school.1/
>
> Under-age pupils are more apt to be considered well-adjusted and over-age pupils poorly-adjusted by their teachers.2/
>
> Counselors and guidance workers who hope to adjust the pupil to his school situation in a short time, by some simple manipulation of the home environment, would seem to be doomed to disappointment.3/

During the school year 1935-1936, Karl F. Nolte administered the Boynton Personal Inventory to 917 pupils in grades V-VIII in Hibbing, Minnesota, to determine personality, scholastic, and conduct abnormalities.4/ Fifty-two pupils were selected for intensive study through the Torgerson Diagnosis. Of

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1/ Lester A. Kirkendall, op. cit., p. 13.

2/ Ibid., pp. 56-57.

3/ Ibid., p. 77.

4/ Karl F. Nolte, "Pupil Adjustment in the Hibbing Public Schools." Elementary School Journal, XXXIX(January, 1939) pp. 371-377.

the original fifty-two, thirty-seven were definitely maladjusted--twenty-nine junior high school and eight elementary school pupils. From this study it was concluded that:

> The chief source of difficulty for most of the children was lack of intelligence, poor home environment, or some physical deficiency, or a combination of two or all three.[1]
>
> Counseling of maladjusted pupils during the school year proved to be effective in two-thirds of the cases.[2]

By way of summing up the findings of the studies mentioned we conclude: that measuring instruments in an adjustment survey would be of use in the discovery of incipient tendencies toward maladjustment without revealing the causes, that factors in home environment carry over into school life and affect adjustment, that all phases of the child should be considered, that the counseling of maladjusted pupils can prove to be effective, that probably most teachers lack the ability and training to use properly instruments measuring personality adjustment, and that the effecting of satisfactory adjustment cannot be expected miraculously in a short period of time.

With all of these points in mind, a survey of the personality adjustment of ninth grade pupils was considered in the present study.

1/ Karl F. Nolte, op. cit., p. 373.

2/ Ibid., p. 377.

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Description of the Bell Adjustment Inventory:-- The Bell Adjustment Inventory (Student Form) was selected for administration to the same representative group of ninth grade pupils mentioned previously in this study. This instrument provides four separate measures of personal and social adjustment: home, health, social, and emotional adjustment. The total score indicates the general adjustment status. There are one hundred and twenty questions which the pupil may answer by encircling "Yes", "No", or "?". Small letters--a, b, c, d--corresponding to the four measures of adjustment, enable the counselor to discover quickly the particular question relating to each measure. There is no time limit, but the respondents are asked to work along as quickly as possible to avoid rationalization.

To facilitate scoring, answer sheets were used so that they could be machine scored. While this procedure has administrative advantages, it is more difficult to analyze the results since the questions are not on the answer sheet.

Analysis and Interpretation of Results of the Bell Adjustment Inventory:-- Table 13 on page 93 shows the high school norms, description, and distribution of scores for 52 boys and 48 girls on each section of the inventory as well as the total adjustment score.

From this table it will be seen that on the Home Adjustment scale ten boys, or 19 percent, made scores indicating

Table 13. Norms, Description, and Distribution of Scores of 52 Boys and 48 Girls on the Bell Adjustment Inventory

	High School Score Range		Description	Distribution of Group		Totals
	Boys	Girls		Boys	Girls	Percent
Home Adjustment	0-1	0-2	Excellent	3	13	16
	2-4	3-5	Good	17	14	31
	5-9	6-13	Average	22	16	38
	10-16	14-20	Unsatisfactory	6	4	10
	Over 16	Over 20	Very Unsatisfactory	4	1	5
Health Adjustment	0-1	0-1	Excellent	4	4	8
	2-4	2-4	Good	15	14	29
	5-9	5-11	Average	25	23	48
	10-15	12-16	Unsatisfactory	7	7	14
	Over 15	Over 16	Very Unsatisfactory	1	0	1
Social Adjustment	0-4	0-4	Very Aggressive	2	2	4
	5-9	5-10	Aggressive	9	5	14
	10-20	11-21	Average	34	23	57
	21-26	22-30	Retiring	3	17	20
	Over 26	Over 30	Very Retiring	4	1	5
Emotional Adjustment	0-2	0-3	Excellent	8	2	10
	3-5	4-8	Good	12	14	26
	6-11	9-18	Average	16	23	39
	12-18	19-24	Unsatisfactory	13	6	19
	Over 18	Over 24	Very Unsatisfactory	3	3	6
Total Score	0-12	0-15	Excellent	2	2	4
	13-24	16-31	Good	13	4	17
	25-44	32-57	Average	20	33	53
	45-60	58-74	Unsatisfactory	13	8	21
	Over 60	Over 74	Very Unsatisfactory	4	1	5

"Unsatisfactory" or "Very Unsatisfactory" adjustment.

On the Health Adjustment scale eight boys, 15 percent, showed "Unsatisfactory" or "Very Unsatisfactory" adjustment.

On the Social Adjustment scale seven boys, 14 percent, showed "Retiring" or "Very Retiring" adjustment.

On the Emotional Adjustment scale sixteen boys, 31 percent, indicated "Unsatisfactory" or "Very Unsatisfactory" adjustment.

In all, seventeen boys, 33 percent, made scores which indicated all-round maladjustment of such proportions designated as "Unsatisfactory" or "Very Unsatisfactory".

From this same table it will also be seen that on the Home Adjustment scale five girls, 10 percent, made scores indicating "Unsatisfactory" or "Very Unsatisfactory" adjustment.

On the Health Adjustment scale seven girls, 15 percent, showed "Unsatisfactory" or "Very Unsatisfactory" adjustment.

On the Social Adjustment scale eighteen girls, 37 percent, showed "Retiring" or "Very Retiring" social adjustment.

On the Emotional Adjustment scale nine girls, 19 percent, indicated "Unsatisfactory" or "Very Unsatisfactory" adjustment.

Nine girls, 19 percent, made scores which indicated all-round maladjustment designated as "Unsatisfactory" or "Very Unsatisfactory".

Summarizing, then, 15 percent of the entire group of 100 representative pupils in the ninth grade showed "Unsatisfactory"

or "Very Unsatisfactory" Home Adjustment; 15 percent showed "Unsatisfactory" or "Very Unsatisfactory" Health Adjustment; 25 percent showed "Retiring" or "Very Retiring" Social Adjustment; 25 percent showed "Unsatisfactory" or "Very Unsatisfactory" Emotional Adjustment; and 26 percent showed all-round maladjustment of proportions designated as "Unsatisfactory" or "Very Unsatisfactory".

Implications for Guidance:-- What does all this mean in the light of guidance procedures?

In the first place, fifteen of the 100 pupils made such responses that indicated maladjustment to home conditions.

> Experimental evidence indicates that home background is one of the most important factors in the formation of the personality of the child.[1]

These pupils, certainly, indicate a need of personal counseling in order to understand more fully their reaction to home conditions. In addition, contact with one or both of the parents should be established. Most parents have the welfare of their children at heart and are willing to cooperate. In some instances progress may be exceedingly slow, involving first the winning of the confidence of both the pupil and the parent, and perhaps an educative program with both.

Nevertheless, if the child can be helped, it will be well

1/ Hugh M. Bell, The Theory and Practice of Personal Counseling. Rev. Ed. Stanford University Press, 1939. p. 10.

worth the effort;

> ......for the lack of psychological vitamins of love, affection and emotional security distorts the personality of the young child and twists his conduct into anti-social behavior.[1]

Although the school cannot do anything to improve certain home conditions--divorce, adoption, sickness and death, economic and social status--there are others with which it can cope and remedy--conflicts with parents, disputes over the choice of a vocation, over-solicitude on the part of parents, and problems arising from favoritism among the children. In other words, the difficulties cannot be dismissed because their origin is in the home conditions of the pupil.

Fifteen pupils also showed "Unsatisfactory" or "Very Unsatisfactory" Health Adjustment. These scores may indicate the need of a physical examination, either by the school physician or the pupil's family doctor. An inspection of the questions pertaining to health adjustment might reveal the nature of the need. It hardly seems necessary to dwell at any length on the importance of the pupil's physical health.

> Suggestions to the student concerning vocational, educational, and other adjustments must be based upon a knowledge of the physical condition of the student. Without such knowledge the counselor is

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1/ Lawrence K. Frank, "Changes in Home and Family Life and Their Relation to Education." School Life, XXIII(March, 1938), p. 241.

> unable to make intelligent recommendations.[1]

There are many types of social maladjustment:

> Many children who are considered normal and who never engage the attention of the police and the courts are nevertheless sources of unhappiness to themselves and to their families because they have not been able to manage to be happy in their relationships at home or at school, or both.[2]

High scores on the Social Adjustment section of the Inventory indicate timidity and reticence in social situations. Twenty-five of the group tested fell into the "Retiring" or "Very Retiring" groups. While it is recognized that not everyone who is retiring is necessarily maladjusted, there are many cases where the individual suffers much unnecessary unhappiness.

> The tendency to regress is a real danger signal and merits the serious attention of the mental hygienist, be he psychologist, parent or teacher.[3]

The joys and benefits of social activity are many and manifest themselves in many ways in the life of the socially adjusted individual.

After the source of a social maladjustment has been determined, there are recommendations which can be made to help the

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[1] Hugh M. Bell, op. cit., p. 49.

[2] Roscoe Pulliam, "Promoting the Mental Health and Social Adjustment of Pupils." Elementary School Journal, XLI(September, 1940), p. 37.

[3] Louis P. Thorpe, "Danger Signals of Needed Pupil Adjustment." School and Society, XLVI(December 18, 1937), p. 801.

pupil to over come his difficulties.

> One of the most effective ways to improve social adjustment is through participation in dramatics.......... Another way to improve the social adjustment of the student is through various clubs and social organizations.....Frequently an increase in the self-confidence of the student may be brought about through an improvement in his appearance and general manners.....Where there are definite physical handicaps which need attention they should be given first consideration.....Finally, the student should be urged to excel in some task; if he learns to do something well, no matter how simple it may be, his self-confidence will increase through the praise and approval of those about him.1/

Twenty-five of the group also made scores indicating "Unsatisfactory" or "Very Unsatisfactory" Emotional Adjustment, which includes problems such as introversion, fear, excitation, depression, feeling of guilt, and others.

> Failure on the part of the child to enter wholeheartedly into play with other children or occasional or frequent withdrawal from the activities of the school, excessive daydreaming, the tendency toward pouting or violent displays of temper, the disposition to be more than ordinarily active, inability to sit still for any reasonable period of time, inability to concentrate on any kind of work for very long at a time, excessive disposition to annoy other people, particularly smaller children, undue preoccupation with any

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1/ Hugh M. Bell, op. cit., pp. 60-61.

> sort of morbid interests--all are symptoms of bad emotional adjustment.[1]

As was indicated previously, some of these emotional maladjustments may be caused by temporary conditions which can be easily remedied. On the other hand, they cannot be dismissed lightly. As Bell says:

> Since an emotional maladjustment tends to influence the entire personality, the task of improving it is large and it requires much time and patience to obtain any improvement at all.....One of the first and most important things to be done in improving emotional maladjustment is to better the physical condition of the individual.....The home conditions should be carefully studied.....The social adjustment of the individual should be studied. ....The counselor may recommend the participation in play activity..... He may also recommend certain carefully selected readings to the individual fitted to his particular age level.....Perhaps the most valuable thing a counselor can do for an emotionally maladjusted individual is to talk with him and listen to his troubles....However, he (the individual) should face the fact that he is not well adjusted personally and socially and should be encouraged to think through and plan a program that will bring about a better life adjust ment.[2]

In the problems of personality adjustment, as in other

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[1] Roscoe Pulliam, op. cit., p. 36.

[2] Hugh M. Bell, op. cit., pp. 77-79.

phases of maladjustment, every teacher in the school must feel that he has some responsibility for helping the child. The more alert and better informed teacher will discern problems of maladjustment that will escape the eye of the teacher who fails to see beneath the surface behavior of her pupils.

> Above all things, every teacher needs to know that the older attitude of the school, which was to suppress the symptoms and to condemn and punish all overt offences, is a poor way to handle problems of behavior and problems of emotional maladjustment. The modern school has the responsibility to understand causes, to know the problems that the child faces, and, insofar as possible, to correct the troublesome conditions.1/

To do everything implied or suggested in effecting satisfactory adjustment seems a tremendous chore to the regular classroom teacher already burdened with routine detail. Nevertheless, if provision is not made for guidance counselors, the burden must perforce fall upon the classroom teacher. Where there is a guidance program definitely organized, however, the classroom teacher must still play an important role.

> If we can find the means whereby the child can be made a happier, more contented individual, and a better adjusted, contributing member of society, then all the time and effort spent upon such a program will not have been in vain.2/

1/ Roscoe Pulliam, op. cit., p. 37.

2/ Elise H. Martens, "Berkeley's Coordinated Program of Child Adjustment." School Life, XVI(November, 1930), p. 56.

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CHAPTER VII

OCCUPATIONAL CHOICES AND ADJUSTMENT

Significance of Occupational Choices in the Junior High School: -- If one were to analyze the various theories advanced as a justification for public school education--or any education--in the United States, he would truly run the gamut, from alpha to omega, in every sense, from the ridiculous to the sublime. But after all fantastic, impossible, idealistic reasons were discarded, there would still remain the arguments that smacked of sanity and held out hope of accomplishment. Among these would probably be the promulgation that education should prepare young people to become worthwhile, contributing members of society, probably with an added emphasis on contributing. And from this hypothesis, by a process of deductive thinking, one could arrive at the conclusion that education should help young people to make a sane occupational choice so that they may contribute in various ways to the society in which they are to live and of which they are to be a part. This is by no means a simple task, as educators well recognize.

> No longer can we assume that every occupation is open to every child unless much more definite steps are taken to make this statement true than have been taken in the past.[1]

One hears much today about the over-crowded conditions in this field or that. As a matter of fact, such a statement can not be made on a truly scientific basis, for

> No occupation in this country has worked out the facts and established the evidence that there are too many workers in that particular field.[2]

The crux of the whole discussion rests, obviously, upon what constitutes a correct occupational distribution. Theoretically, at least, such a condition exists only when people of the same ability receive the same wages in all occupations.[3] Rhetorically speaking, then, does a correct occupational distribution exist at all?

What contribution can the junior high school make toward the realization of the proper occupational distribution of its students?

> Some maintain that the junior-high-school student is too young to give serious consideration to problems

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[1] Harold F. Clark, Economic Theory and Correct Occupational Distribution. New York: Teachers College Bureau of Publications, Columbia University, 1931. p. 20.

[2] Ibid., p. 58.

[3] Ibid., p. 57.

of vocational information and choice.[1]

Most people recognize that occupational choices made at such an early age are highly tentative. Still, this does not mean that they are without value. It is not the intention of the writer to indicate that early occupational choices should be forced and then adhered to dogmatically.

However, vocational guidance in the junior high school may be justified on the following grounds:

1. That the very purpose of the junior high school includes the development and exploration of interests.

   Valid occupational choices have as one basis the factor of interest in the chosen occupation. Many and varied experiences provide the basis for the growth of interests, including vocational interests.

   Of interest in connection with this point is the study made by Mitchell in 1931 with 125 pupils in the freshman class at the West Newton High School, Pennsylvania.[2] The following reasons were the ones listed most frequently as reasons for tentative occupational choices:

   I like this kind of work.
   It is the coming work of the future.

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[1] George N. Boone, "Junior High School and Vocational Information. An Evaluation in Terms of Vocational Information." Junior-Senior High School Clearing House, VII(April, 1933), p.496.

[2] Claude Mitchell, "Pupils' Vocational Choices." Vocational Guidance Magazine, XI(May, 1933), pp. 363-367.

> I am interested in this type of work.
> I always desired it since I can remember.

There are numerous factors that enter into the picture that make the occupational choice--even the tentative one of a junior high school pupil--a complex, and sometimes baffling, problem. O'Brien has summed it up in this way:

> The sources of a child's vocational interest are three fold: first, influences from within the individual himself; secondly, familiar influences; thirdly, social influences other than those emanating from the home.[1]

2. That the choice of courses and curricula is forced upon the student in his junior high school years, and one cannot speak of educational choices without considering occupational choices.

   In connection with this point, Proctor found in the thirteen year check-up of 1500 persons to whom the Army-Alpha Intelligence test was given in 1917-1918 that the length of schooling seems to be closely related to the rank, or level, of occupational status.[2]

3. That the needs of the "drop-outs"--those who will leave school at the end of the ninth grade or before

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[1] Frank J. O'Brien, "How They Choose Vocations." Occupations, XIII(November, 1934), p. 127.

[2] William M. Proctor, "Intelligence and Length of Schooling in Relation to Occupational Levels." School and Society, XLII(December 7, 1935(, pp. 783-786.

high school graduation--must be met. Thus, even though ideally the ninth grade may be too soon to give serious attention to vocational interests, practically it must be done in view of the fact that this is a terminal point in the education of so many of our young people.

4. That guidance, as all education, is a continuous process; that is, vocational decisions come only after a number of minor, but still important, decisions are made.

Familiarity with occupations should be one of the prerequisites to making such decisions. Yet, in 1932, 328 senior boys and 616 girls in ten Iowa high schools were asked to fill out questionnaires relative to occupations. Three fourths of the girls' choices fell in the following occupations: stenographer, teacher, nurse, and beautician. Over 60 percent wished to become stenographers or teachers.[1/]

In 1934, 2321 high school seniors in practically every four-year high school in Wyoming were asked what occupations, trades, or businesses they expected to enter. These significant facts were culled from the data obtained:[2/]

[1/] C. W. Failor, "Occupational Maladjustment." Vocational Guidance Magazine, XI(February, 1933), pp. 209-211.

[2/] L. R. Kitzer, "Vocational Choices of High School Seniors." Educational Administration and Supervision, XXI(November, 1934), pp. 576-581.

> Over half of the Wyoming high-school seniors of the class of 1934 were undecided in regard to their life's work.
>
> It seems that too large a percentage of Wyoming high-school graduates intend to enter the professions and that not a large enough percentage plan to enter other important occupations.

These are by no means isolated cases indicating a need for presenting vocational information; they are typical of a widespread condition among the youth of our secondary schools.

Because it was felt that occupational choices are of significance in adjustment, they were considered in the present study. Although it is recognized that in themselves they may not constitute maladjustments in the ninth grade, they may be the precursors of later maladjustments.

For instance, if a boy wants to be a doctor but fails to elect the right courses and curriculum in his preparatory years and so is forced to turn to sheet metal work when his aptitudes and interests lie in medicine, there may well be a case of maladjustment. Granted that this is an exaggerated case, it is not purely a figment of the imagination.

The questionnaire on page 107 was administered for these purposes: (1) to see the range of tentative occupational choices of a representative group of 100 ninth grade pupils; (2) to see what factors influenced the selections; (3) to determine to what extent educational planning is line with

OCCUPATIONAL ADJUSTMENT QUESTIONNAIRE

1. Name--Age--------

2. Father's Occupation--------------------------------------

3. Mother's Occupation--------------------------------------

4. Your tentative occupational choice-----------------------

5. Why did you select this occupation? Check one reason.

   a. Interest in work a.---------
   b. Good salary to be expected b.---------
   c. Steady work c.---------
   d. Parents want you to do this d.---------
   e. Someone you know is successful in this work e.---------
   f. Write in any other reason you may have f.---------

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6. Do you plan to enter high school? Check one.

   a. Yes------- b. No------- c. Undecided-------

   d. If not, why not?---------------------------------------

7. Do you plan to leave school as soon as you are sixteen?

   Check one.

   a. Yes------- b. No------- c. Undecided-------

   d. If you do, why?--

8. Do you expect to graduate from high school? Check one.

   a. Yes------- b. No------- c. Undecided-------

   d. If not, why not?---------------------------------------

9. Do you plan to continue your education after high school?

   Check one.

   a. Yes------- b. No------- c. Undecided-------

10. If you do plan to continue your education, where do you plan to go, or what do you plan to do?------------------------

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occupational preferences; (4) to anticipate drop-outs with a view to prevention and guidance.

Analysis of Data on Occupational Questionnaire:-- The following tables summarize the data obtained on the questionnaire relative to occupational planning.

Table 14, on page 109, shows the tentative occupational choices of the pupils in the college preparatory curriculum group as compared with their parents' occupations. From this table it may be seen that, generally speaking, the pupils aspire to higher positions than those held by their parents, with the preference being for the professions.

Table 15, on page 110, shows the tentative occupational choices of the pupils in the commercial curriculum group as compared with their parents' occupations. Twenty-five of the pupils have expressed a liking or preference for occupations in line with their curriculum, with the great majority being for secretarial work. Here too the positions seem to surpass in rank those held by their parents.

Table 16, on page 111, shows the tentative occupational choices of the pupils in the general curriculum group as compared with their parents' occupations. These pupils also aspire to better positions than those held by their parents.

This fact bears out the generally accepted democratic belief that children in America aspire to, and often do, lift

Table 14. Tentative Occupational Choices of 35 Pupils in the College Preparatory Curriculum as Compared with Their Parents' Occupations

Pupils' Choices		Fathers' Occupations		Mothers' Occupations	
1	Air hostess	1	Accountant	29	Housewife
1	Airplane engine mechanic	1	Banker	1	Grocery store manager
5	Aviator	2	Butler	1	Cook
1	Babies' nurse	2	Carpenter	1	Hairdresser
2	Civil engineer	1	Cattle dealer	1	Stitcher
1	Commercial artist	2	Chauffeur	1	Teacher
1	Dental hygienist	1	Electrician	1	Dead
1	Doctor	1	Insurance agent	35	
2	Draftsman	1	Inventor		
1	Electrical engineer	1	Leather worker		
1	Explorer	3	Machinist		
1	Hairdresser	1	Mason		
1	Insurance counselor	1	Manager of clothing store		
2	Lawyer	1	Painter		
1	Musician	2	Pattern maker		
1	News photographer	2	Postal employees		
4	Nurse	1	Police officer		
1	Optometrist	2	Salesman		
1	Physical Instructor	1	Store Clerk		
1	State Trooper	1	Sheet metal worker		
3	Teacher	1	Telephone company manager		
2	United States Naval Officer	1	Telephone repair man		
35		1	Undertaker		
		1	United Shoe foreman		
		1	Water works employe		
		1	Unemployed		
		1	Dead		
		35			

Table 15. Tentative Occupational Choices of 31 Pupils in the Commercial Curriculum as Compared with Their Parents' Occupations

Pupils' Choices		Fathers' Occupations		Mothers' Occupations	
2	Aviator	1	Automobile salesman	26	Housewife
1	Babies' nurse	2	Carpenter	1	Shoe factory worker
2	Bookkeeper	1	Caretaker	1	Factory worker
1	Dietitian	1	Electrician	1	Bookkeeper
2	Hairdresser	1	Farmer	1	Store keeper
1	Manager of well-to-do store	2	Gardener	1	N.Y.A. supervisor
1	Office work	1	Gas worker	31	
20	Secretary	1	Gas Light Co. employe		
1	Stenographer	1	Leather worker		
31		1	Lather		
		3	Machinist		
		1	Metal dealer		
		2	Moulder		
		1	Policeman		
		2	Shoemaker		
		1	Steamfitter		
		1	Trouble shooter		
		1	Trucking business		
		2	United Shoe worker		
		1	W.P.A. foreman		
		1	W.P.A. laborer		
		1	Unemployed		
		1	Ill-does not work		
		1	Dead		
		31			

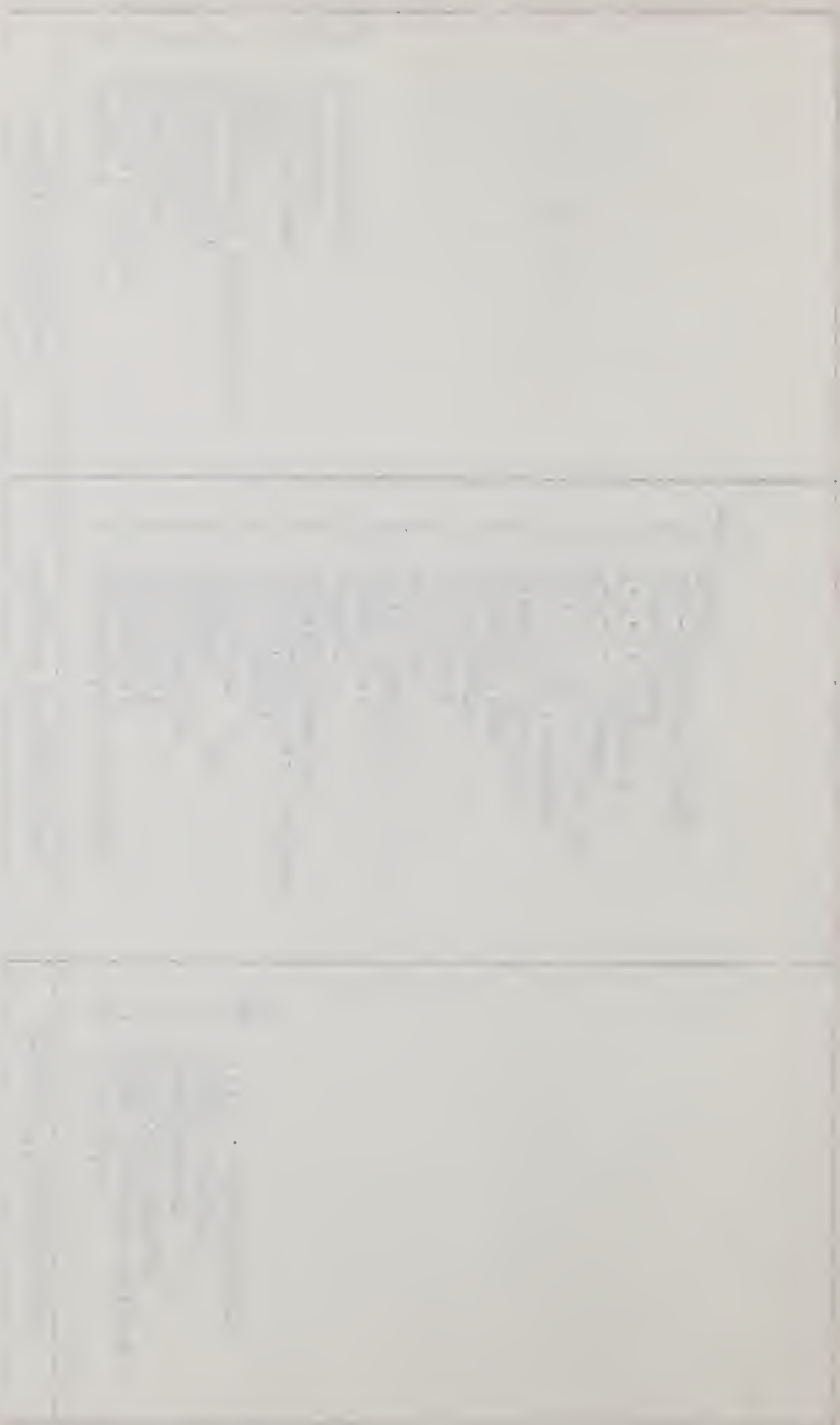

Table 16. Tentative Occupational Choices of 34 Pupils in the General Curriculum as Compared with Their Parents' Occupations

Pupils' Choices		Fathers' Occupations		Mothers' Occupations	
1	Air hostess	1	Assistant water gas maker	29	Housewife
1	Airplane mechanic	1	Auditor	1	Housecleaner
1	Artist	4	Carpenter	1	Shoe factory worker
3	Carpenter	3	Cobbler	1	Game Filler
2	Cartoonist	1	Draftsman	1	W.P.A. worker
1	Children's nurse	1	Electrician	1	Dead
1	Electrical engineer	1	Gas fitter	34	
1	Electrician	3	Laborer		
1	Engineer	2	Leather worker		
1	Governess	4	Machinist		
3	Machinist	1	Milk dealer		
3	Mechanic	1	Musician		
1	Musician	1	Railroad messenger		
1	Navy	1	Truck driver		
1	Nurse	1	Salesman		
1	Office worker	1	Upholsterer		
2	Pattern maker	4	No occupation		
2	Police officer	3	Dead		
2	Printer	34			
1	Sheet metal worker				
1	Sports writer				
1	Stenographer				
2	Undecided				
34					

themselves above the occupational rank held by their parents. Many others remain in the same rank but do not follow in the same occupation.[1]

Table 17, on page 113, shows the replies of the pupils in answer to the question "Why did you select this occupation?" As may be seen, 88 percent of the group indicated that their interest in the occupation prompted the selection. Genuine interest in a vocation is one of the factors necessary for success. However, there is the questions as to how permanent this interest is at this level.

Only one girl wrote in any reason of her own, while a few checked more than one. The former checked interest in the work as her reason for selecting nursing and added, "I want to cure people and keep them from dying."

Table 17 shows the replies in answer to questions relative to educational planning. As may be seen from this summarized data, all but one pupil are definitely planning to enter high school. Only three are uncertain as to whether they shall leave as soon as they are sixteen. All except two expect to graduate from high school. If such conditions persisted through high school, there would not be, apparently, any serious problem of pupil elimination.

It will also be noted that 49 percent of the group are

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[1] William M. Proctor, "13-Year Follow-up of High School Pupils." *Occupations*, XV(January, 1937), pp. 306-310.

Table 17. Range and Distribution of Replies to "Why Did You Select This Occupation?"

5. Why did you select this occupation?	Curriculum Gen'l.	 C. Prep.	 Com'l.	Total
a. Interest in work	28	29	31	88
b. Good salary to be expected	1	0	1	2
c. Steady work	2	5	1	8
d. Parents want you to do this	2	0	1	3
e. Someone you know is successful in this work	0	1	0	1
	33	35	34	102

planning to continue their education after high school, while an additional 29 percent are undecided as to whether they will continue.

The last item on the questionnaire, "If you do plan to continue your education, where do you plan to go, or what do you plan to do?" was left blank by many, since they were undecided or did not plan to continue their education.

Table 19 shows the replies that were made to this question. Sixty-two of the pupils at least have some school or plan in mind at the present time.

Of particular note is the fact that in the general curriculum group two boys have indicated plans for going to Northeastern University and Rensselaer Polytechnical Institute, while

Table 18. Replies of Pupils to Questions Relative to Educational Planning

Question	Replies by Curriculum Group			
6. Do you plan to enter high school?	Gen'l.	C. Prep.	Com'l.	Total
a. Yes	33	35	31	99
b. No	0	0	0	0
c. Undecided	1	0	0	1
7. Do you expect to leave school as soon as you are sixteen?				
a. Yes	0	0	0	0
b. No	32	34	31	97
c. Undecided	2	1	0	3
8. Do you expect to graduate from high school?				
a. Yes	32	35	31	98
b. No	0	0	0	0
c. Undecided	2	0	0	2
9. Do you plan to continue your education after high school?				
a. Yes	7	29	13	49
b. No	15	0	7	22
c. Undecided	12	6	11	29

Table 19. Pupils' Plans for Continuing Their Education

College Preparatory Group		General Curriculum Group		Commercial Curriculum Group	
3	Airplane school	2	Art School	1	Army air corps
1	Art school	1	Beverly Hospital	5	Business school
1	Banford Academy	1	Commercial school	1	College
3	Beverly Hospital	1	Essex County Agricultural School	1	Course in Salesmanship
1	Burdett College	1	Night school of some kind	1	Essex County Agricultural School
1	Business school	1	Northeastern Univ.	1	Hairdressing school
3	College of some sort	1	Pittsburgh School of Aeronautics	1	Hawthorne Institute
1	Forsythe Dental School	1	Rensselaer Poly. Institute	3	Lynn Burdett
1	Georgetown University	1	School for mechanics	1	Night school for shorthand and typing
1	Harvard	1	Study to be air hostess	2	Salem Commercial School
3	Mass. Institute of Technology	1	St. John's Prep. School	17	
1	Mass. School of Optometry	12			
1	Nursing school				
1	Parks Air College				
1	Sargent School of Physical Education				
1	Salem Teachers College				
1	Sparton Aeronautical School				
1	Study plastic surgery				
1	Tufts College				
1	U.S. Army Air Corps				
2	U.S. Naval Academy				
1	Virginia State College				
33					

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]
[illegible]

two girls are planning to enter nursing. Two more boys are considering art school. It seems highly improbable that these six young people--if they persist in these desires--could realize their ambitions; for, in the two schools named, college preparatory subjects are required, as they are in most reputable nurses' training schools. The boys wishing to go to art school may also find it difficult to do so if they continue in the general curriculum.

In addition, one girl revealed that she wanted to go into office work after high school; yet she is taking the general curriculum and plans no further education. In view of the fact that there are numerous girls who have had some training in office work, it will, no doubt, be difficult for this girl to do what she wants if she stays in the general curriculum and goes no farther than high school.

In the commercial group, six girls revealed their intention of being secretaries without continuing their education after high school. Whether they can distinguish between secretarial work and simple office work is a matter of conjecture. Another girl in this group indicated her desire to be a babies' nurse without going anywhere after high school graduation. Obviously, she will not get much training for child nursing in the commercial curriculum.

From the data obtained on this occupational adjustment

questionnaire, the following conclusions were reached:

1. Almost all of the group, 99 percent, plan to enter high school; 98 percent plans to graduate.
2. Forty-nine percent of the group plan to continue their education after high school graduation, with an additional 29 percent being undecided.
3. Sixty-two percent indicated schools or institutions they were considering at which to continue their education.
4. At least fourteen of the pupils indicated tentative occupational plans which probably are not compatible with their educational plans.

Occupational Choices and Occupational Opportunities:-- It can not be emphasized too strongly that the writer is fully cognizant of the fact that these early occupational choices may be highly tentative. Nevertheless, they are of value if only to use for pointing out discrepancies between occupational choices and probable opportunities.

Table 20 shows the percentage of occupational choices, on April 4, 1941, of the 48 girls of the group that participated in this study as compared with the occupations of 2767 Beverly women gainfully employed, according to the 1930 United States Bureau of Census figures. Even with these few it is significant to note the discrepancy between occupational choices and

probable opportunities. Attention is centered on the clerical occupations and the professions because of the disproportionate choices. In all, only sixteen different occupational choices were indicated, probably because of a lack of familiarity with the occupations open to women.

Table 21 shows the percentages of occupational choices, on April 4, 1941, of 50 of the 52 boys who participated in this study. (Two were undecided and listed no occupational choice,) Here again one notices the disproportionate number selecting the professional occupations, while half of the Beverly men gainfully employed in 1930 were in the manufacturing and mechanical occupations. Twenty-eight different occupations were indicated in the boys' selections.

That these one hundred pupils are indicative of the entire ninth grade is borne out in Table 22, on page 122, showing the occupational choices of 164 ninth grade girls and in Table 23, on page 123, showing the occupational choices of 177 ninth grade boys indicated in the early part of the current school year, September 18, 1940.

Of particular significance in Table 22 showing the choices of the girls is the fact that 51 percent indicated a preference for the professional service, while only 17 percent of the 2767 Beverly women gainfully employed were in these occupations in 1930. Also of note is the fact that 41 percent indicated

Table XX. Comparison of Tentative Occupational Choices of 48 Ninth Grade Girls with 2767 Beverly Women Gainfully Employed in 1930

Legend—

■ Percentage of occupational choices of 48 ninth grade girls in the Briscoe Junior High School, Beverly, Massachusetts, April 4, 1941

▨ Percentage of Beverly women in various occupations according to the U.S. Bureau of Census figures for 1930 (2767 women)

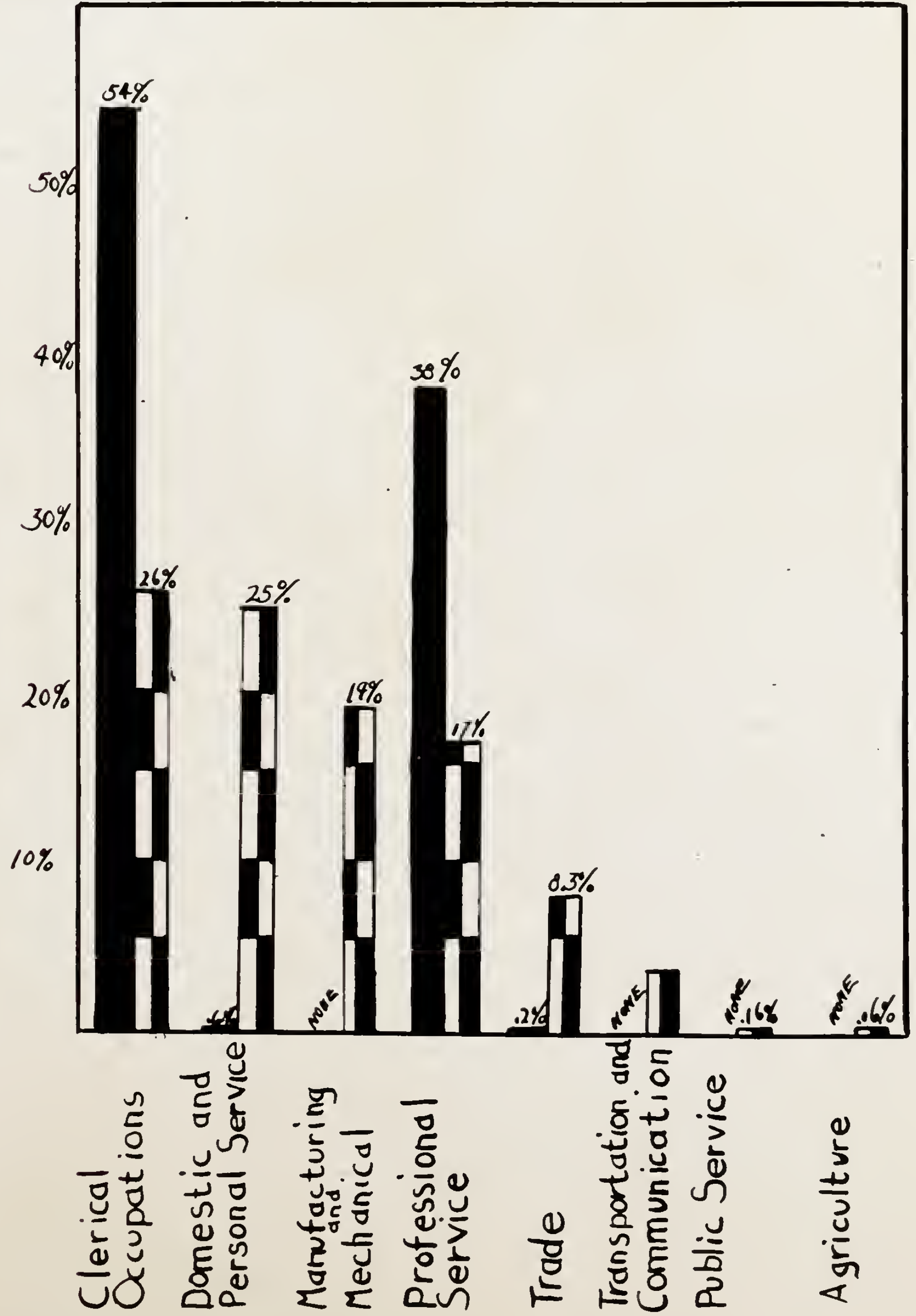
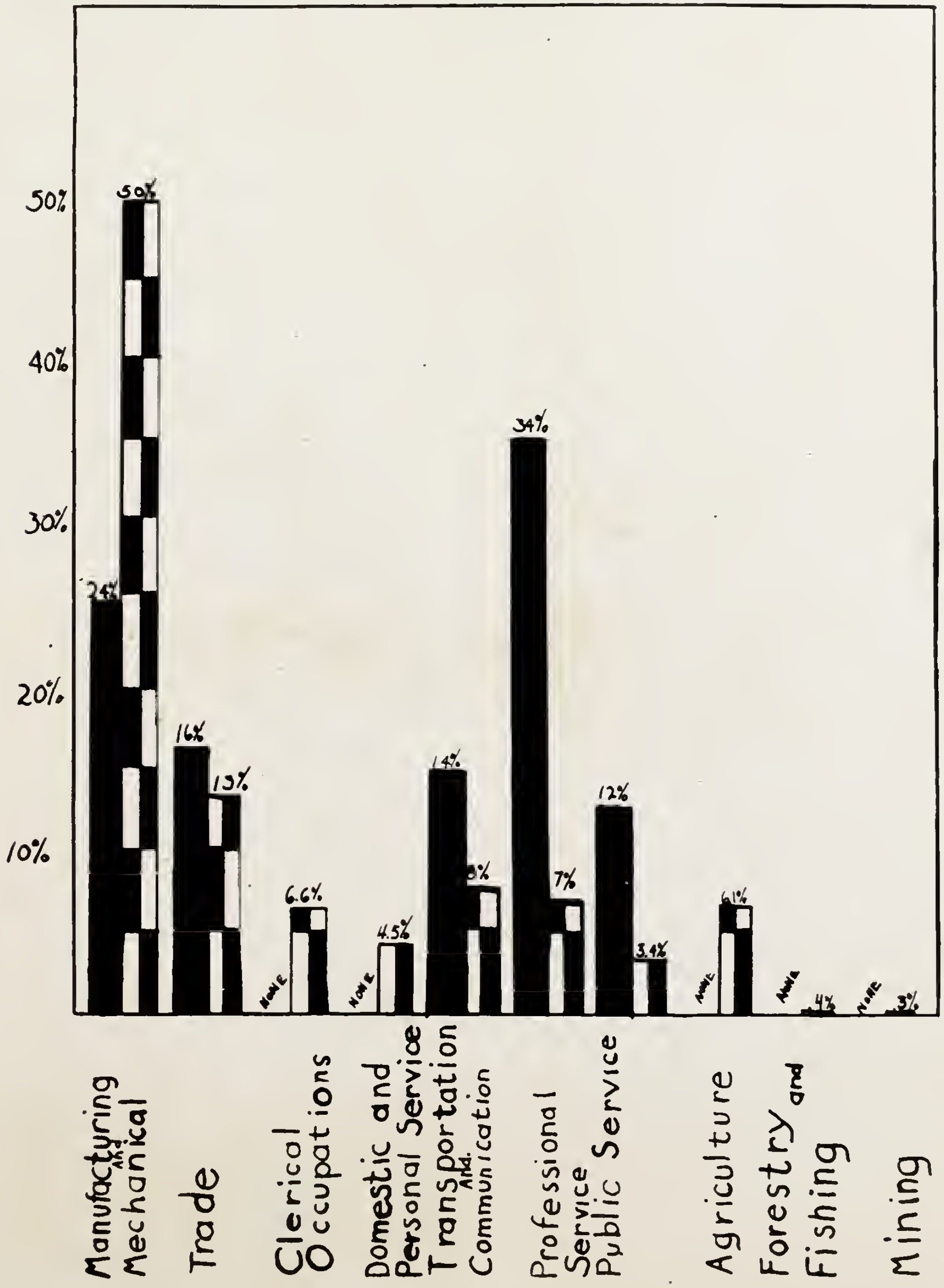


Table XXI. Comparison of Tenative Occupational Choices of 50 Ninth Grade Boys with 7670 Beverly Men Gainfully Employed in 1930

Legend—

■ Percentage of occupational choices of 50 ninth grade boys in the Briscoe Junior High School, Beverly, Massachusetts, April 4, 1941.

▨ Percentage of Beverly men in various occupations according to the U. S. Bureau of Cens figures for 1930 (7670 men)



clerical occupations as tentative choices as compared to the 26 percent employed in this field. Yet, while 25 percent of the women in Beverly in 1930 were employed in domestic and personal service, only 7 percent of the Briscoe girls indicated any preference for this work. Of equal significance is the fact that not one girl indicated any interest in the manufacturing and mechanical occupations which employed 19 percent of the women in Beverly in 1930.

That part of these conditions may be due to a lack of familiarity with the types of occupations may be indicated in the fact that only twenty different types were selected. For instance, the only two branches of work mentioned in the clerical occupations were secretary and office work.

Table 23, on page 123, shows the tentative occupational choices of 177 ninth grade boys as indicated also on September 18, 1940, compared with 7670 gainfully employed men according to the 1930 Bureau of Census figures. The salient feature to notice here is that while 50 percent of the men in Beverly in 1930 were employed in the manufacturing and mechanical trades, only 16 percent of the ninth grade boys indicated any preference for these occupations. Also of note is the fact that 37 percent of the boys expressed a preference for the professional occupations, while only 7 percent of the men found employment in these fields in 1930.

That the boys are a little more familiar with the types of

Table XXII. Comparison of Tentative Occupational Choices of 164 Ninth Grade Girls with 2767 Beverly Women Gainfully Employed in 1930

Legend—

■ Percentage of occupational choices of 164 ninth grade girls in the Briscoe Junior High School, Beverly, Massachusetts, September 18, 1940

▨ Percentage of Beverly women in various occupations according to the U.S. Bureau of Census figures for 1930. (2,767 women)

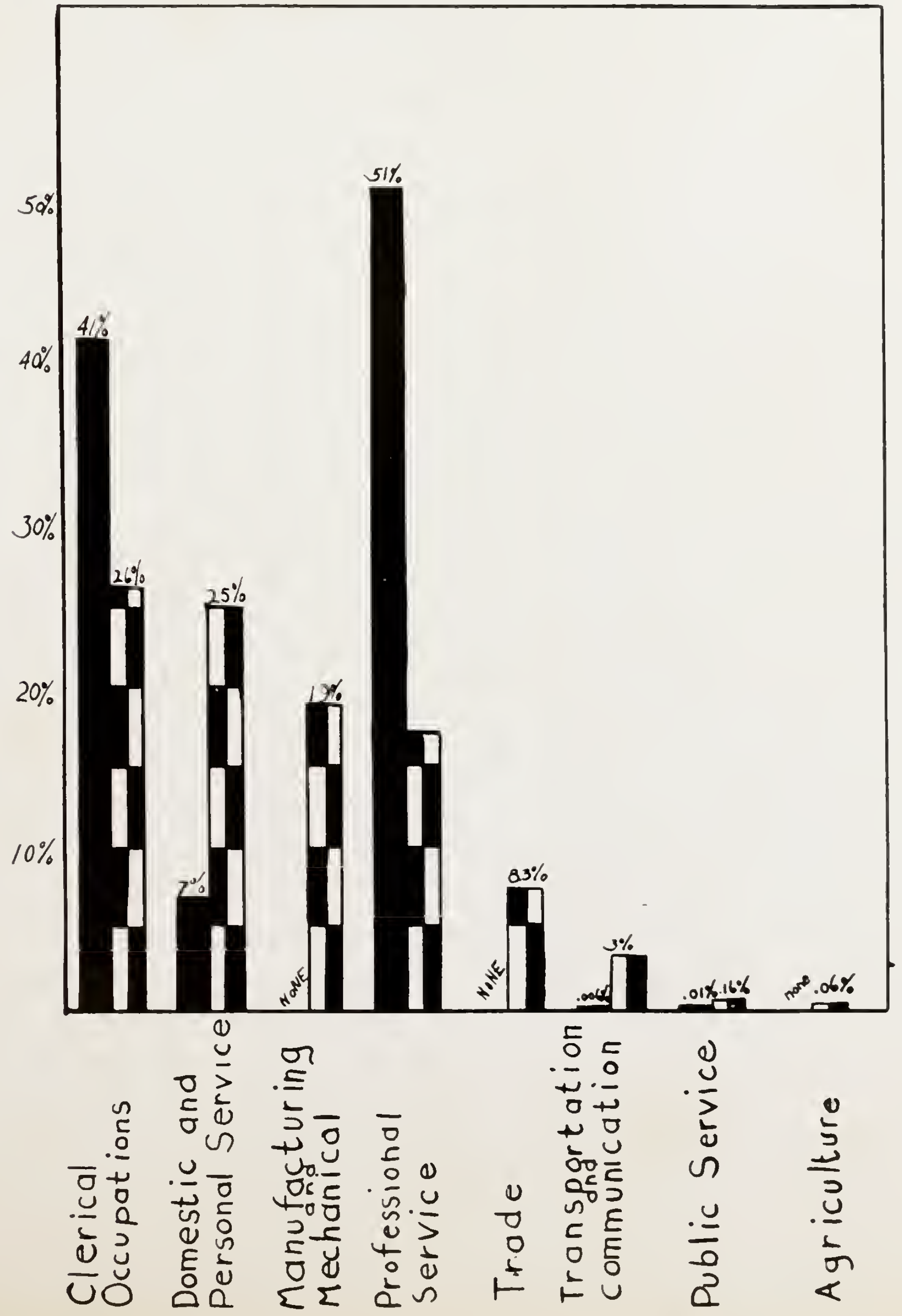
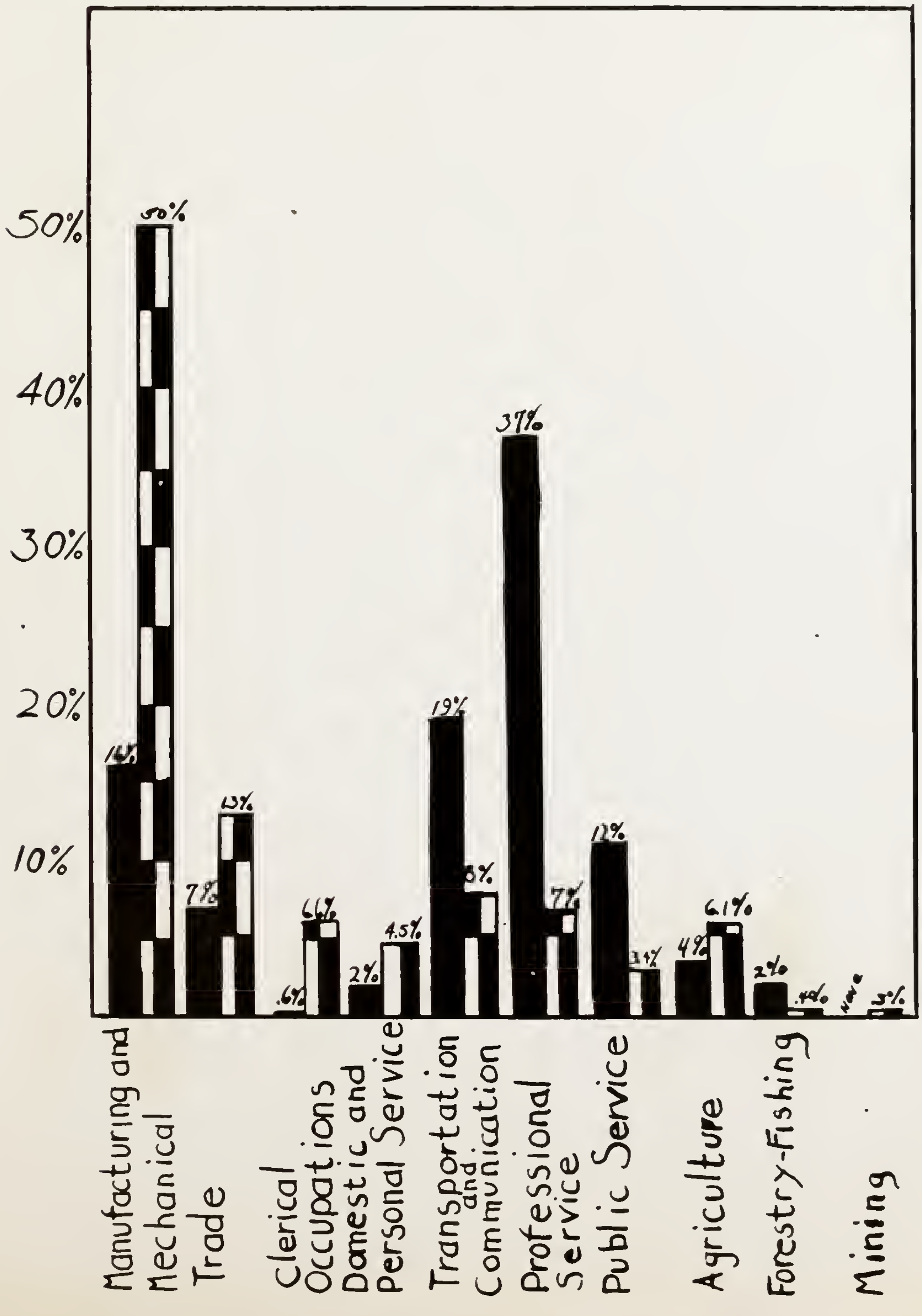


Table XXIII. Comparison of Tenative Occupational Choices of 171 Ninth Grade Boys with 7670 Beverly Men Gainfully Employed in 1930

Legend—

■ Percentage of occupational choices of 171 ninth grade boys in the Briscoe Junior High School, Beverly, Massachusetts, September 18, 1940.

▨ Percentage of Beverly men in various occupations according to the U. S. Bureau of Census figures for 1930 (7670 men)



occupations may be indicated by the fact that the range of selections seemed to be a bit broader, with fifty different occupations being indicated.

Implications for Guidance:-- In the face of such evidence, are tentative occupational choices of importance? Obviously they are, if only as an indication of the extent of the need for occupational information.

What can guidance do in such a situation?

1. It should keep the importance of making occupational choices constantly before the pupil. Through a cumulative, progressive program of group guidance; occupational information should be provided for all over an extended period of time.
2. It should show the necessity for merging, or integrating, occupational and educational planning. Guidance should reveal the pupil to himself so the appropriateness of choices may be seen.
3. It should show the probable chances for employment in specified occupations, not only on a local basis, but on a state and nationwide basis.
4. It should help pupils to realize the importance of selecting an occupation compatible with all factors which enter into the problem of satisfactory occupational adjustment.

This is by no means an easy task, but it is one which can

be successfully accomplished. The public school can no longer evade the issue: it must recognize its duty to point out to the youth of America their abilities, interests, aptitudes, and their limitations. When such a program is adequately carried out, then we will have done much to bring about satisfactory occupational adjustment.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Limitations of the Study:-- Throughout this study, emphasis has been placed on the many aspects which should be considered in the analysis of adjustment of an individual. Then, in a paradoxical fashion, the investigation was far from being all-embracing. The writer realizes that there are other phases of adjustment and that this is by no means an exhaustive study of the problems of adjustment of ninth grade pupils. Cognizant of the fact that the steps herein taken are but a beginning, it is hoped that they will serve to instigate a deeper delving, not only into the situations here presented, but also others which may have even more far-reaching consequences.

The reader may also consider as a limitation the fact that only one hundred pupils of a class of 360 were considered in the study, except in one instance. Since this investigation was not carried on as a part of the administrative procedure, it did not warrant the taking of any school time. Consequently, it would have been difficult to get an entire grade to participate in another extra-curricular project when there are so many de-

mands being made on the pupils' leisure time. However, this limitation is off-set in part by the fact that the one hundred pupils who did participate represent a good cross-section of the entire grade.

Another question which may arise is the fact that only one instrument was used in each area investigated. This too the writer realizes is a limitation, but the instruments were well-chosen and in themselves give basis for guidance efforts. However, it is hoped that this very fact will serve to stimulate further interest as to whether conditions are as they been reported.

It has not been the purpose of the writer to appear unduly critical of the school in question. Since the school is one typical of many in our communities, like situations would no doubt be found in many other schools. The study was undertaken in a spirit of helpfulness and according to the best guidance procedures, which recommend a survey of the situation at hand before a systematic program of guidance is attempted.

Because of the limited confines of the subject, no mention has been made of the guidance work already being done in the school. Nevertheless, it should not be inferred that there is none. It is for this very fact that the study was undertaken: in order to render more effective the guidance already being given.

Summary of Areas of Adjustment Studied:-- The first need for adjustment was indicated through an investigation into the study habits of ninth grade pupils. From the data available, it seems apparent that ninth grade pupils do not know how to study effectively. Furthermore, it also seems plausible that many pupils are not achieving in proportion to their ability, a fact which may be due in part to faulty study habits.

This latter fact was also brought out by an investigation in the area of mental ability. Here it was found that pupils of superior ability, in some instances, were achieving no more than pupils with average or below average mental ability. It was not determined why they were not achieving in proportion to their ability, but the inference is that some agency should determine the cause and effect a remedy.

Another area investigated was that of reading ability. The instrument used purported to measure vocabulary, level of comprehension, speed of reading, and accuracy. Here too was found a situation worthy of attention to effect proper adjustment, since twenty-three percent of the group was found to be only at the fifth, sixth, or seventh grade level in reading.

A measure of personality adjustment was attempted in the areas of home, health, social, and emotional adjustment as measured by one standardized instrument. In this area alone, the group showed much need for guidance in effecting satisfactory adjustment.

A final area of adjustment investigated was that designated as occupational adjustment and was revealed through tentative occupational choices and educational planning.

As has been suggested before, these areas do not by any means exhaust the many phases of adjustment. However, they do bear out the thesis of this study: to bring to light some of the evidences of the need for guidance in the ninth grade.

Conclusions Reached from Study:-- To sum up briefly, then, the following salient conclusions were deduced from this study:

1. The great majority of ninth grade pupils do not know how to study effectively. Some pupils are apparently getting good grades despite their poor study habits and not because of them.
2. Many pupils are not doing work commensurate with their native, inherent ability.
3. Twenty-three percent of the group measured are trying to do ninth grade work while they are only at the fifth, sixth, or seventh grade level in reading ability. Still others show a less serious situation, but nevertheless a defect in reading ability.
4. Fifteen percent of the group indicates a need for investigation into home conditions to see if anything can be done to eliminate unsatisfactory conditions.
5. Fifteen percent of the group is also functioning below

par physically.

6. Twenty-five percent shows a need for aid in making satisfactory social adjustment.
7. Twenty-five percent of the group also shows unsatisfactory emotional adjustment, the causes of which should be determined as soon as possible in order to prevent more serious maladjustment in adult life.
8. Twenty-six percent of the group shows all-round maladjustment of proportions significant enough to warrant individual conseling and treatment.
9. All except two of the group, ninety-eight, have made tentative occupational choices.
10. All but one are definitely planning to enter high school.
11. All but three of the group expect to graduate from high school, the other three being undecided.
12. In a few cases, pupils are planning to go into occupations for which they are not making adequate educational preparation.

The final chapter of this study will offer specific recommendations with a view to alleviating some of the conditions mentioned above.

CHAPTER IX

RECOMMENDATIONS

Because many of the recommendations listed below have been stated in connection with the various phases of adjustment described in previous chapters this section will present only a brief recapitulation of them and will suggest a few additional general recommendations which are based upon findings of the total study.

In mentioning or implying weaknesses or shortcomings in the system studied, the author does so solely for the purpose of pointing out certain existing conditions which indicate the areas wherein the next steps toward improvement of guidance service might be taken.

General Recommendations:--

1. The guidance problems which have become apparent among so many pupils in the general curriculum suggest the advisability of re-evaluation of this curriculum as to purpose, content, and method of administration.
2. To provide more objective information concerning students for guiding purposes, an extension of the program

of testing, not only in the fields of mental ability and scholastic achievement, but also in other areas, such as special aptitudes, interests, and personality is recommended.

3. To make possible the proper administration of such a testing program and to provide the qualified leadership necessary to insure a continuous program of in-service training of the faculty to meet the needs noted in this study, the appointment of a person competent to render these and other specialized guidance services is highly desirable.

4. Of fundamental importance is the recommendation that provision be made for group guidance and individual counseling with the understanding that such service be available to all of the pupils of the school. This might well be met by a systematic program of home room guidance augmented by the services of class counselors wherein a proper division of guidance responsibilities and activities would be made between sponsors and counselors.

Recommendations Regarding Study Habits:--

5. If the faculty members of each department would draw up definite methods of procedure in studying for their particular subject, it is believed that the

pupils would benefit extensively. These study hints should not be too technical if they are to be effective.

6. While it is recognized that it is difficult to find adequate room space during certain periods of the day, it seems that every attempt should be made to eliminate the study groups now assigned to the assembly hall.

Recommendations in the Area of Mental Ability:--

7. More than one index of mental ability should be available by the time the pupil is in the ninth grade.

8. Much time is apparently spent in trying to raise the level of achievement of slower pupils, sometimes to the detriment of brighter pupils. Special attention might well be given to the problem of enabling pupils of superior ability to work up to their level of ability. In this connection, it might be well to consider the unit assignment as a means of meeting individual differences.

Recommendations in Reading:--

9. Because of the tremendous importance of reading ability much improvement can and should be effected in this area. The findings of this study would seem

to indicate the need of a remedial reading clinic under the supervision of one skilled in clinic procedures.

10. In addition the responsibilities of all classroom teachers for the improvement of reading should be made clear and assistance provided them whenever necessary to discharge this important function.
11. The appointment of a qualified "coach teacher" might also help in reading and in the prevention of failures caused by a reading disability.

Recommendations for Personality Adjustment:--

12. A trained visiting teacher could do much to establish better relations between the home and the school and to bring about conditions in the home which would be conducive to increased school success of pupils.
13. More thorough and more frequent health examinations would no doubt reveal those conditions which contribute to unsatisfactory health adjustments revealed in this study.
14. A program of social guidance should be systematically planned and carried out, with counseling and guidance being given on the value of participation in activities. A point system is suggested to aid in the distribution of the honors and positions in the school

and to bring to light retiring people who would benefit from participation in school activities.

Recommendations in Occupational Adjustment:--

15. The excellent work being done in the field of occupations by the social studies department with the pupils in the general curriculum should be extended to the college preparatory and commercial curricula; for too many of these pupils do not have an honest appreciation of occupations other than a selected few professions.
16. Provisions should be made so that every course in every curriculum may offer maximum opportunities for exploration and for imparting related occupational information.
17. A continuous program of investigation into the nature of pupil adjustment in all important areas is recommended in order to provide an intelligent basis for further improvement of guidance efforts.

It must not be inferred that any of these suggestions can be carried out at once. Any innovation must be gradual, utilizing the present resources in the effort to evolve a comprehensive program of guidance.

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